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INTRODUCTION AND SUMMARY

Defendants' submissions in opposition to Plaintiffs' motion for summary judgment confirm that the pertinent facts are not in dispute. Defendants concede, for example, that the Census Bureau's decision to use what they have called "hot-deck imputation" in the 2000 census deprived Utah of a fourth seat in the House of Representatives. They also acknowledge that, under the Bureau's imputation methodology, the Bureau includes in the congressional apportionment count what can fairly be described as "phantom residents," *i.e.*, individuals who have never been identified and are not known to exist.

Defendants also concede that the Bureau used imputation in the 2000 census not only to estimate the number of persons living in dwelling units that census enumerators had personally verified as existing, but also to estimate persons living in what Plaintiffs have called "phantom dwelling units," that is, addresses that have *not* been verified as corresponding to real dwelling units (as opposed, for example, to storage units, businesses, demolished buildings, buildings under construction, etc.). As Defendants admit, this decision alone – imputing individuals to *phantom* dwelling units – deprived Utah of a fourth House seat, independently of the decision to impute phantom residents to *known* dwelling units.

These undisputed facts show just how far the Census Bureau ("Bureau") has strayed from the text and history of both the Census Act and the Constitution's Census Clause. For over 250 years, long before the adoption of the Constitution in 1789 or the first U.S. census in 1790, it has been well-understood that a "census" – which the Constitution calls an "actual enumeration" – and an "estimate" are mutually exclusive concepts, and that one of the inherent limitations of an actual enumeration is that some people are not included simply because they cannot practicably

be counted. Indeed, both George Washington and Thomas Jefferson lamented what Washington called the “certainty” that “our *real* numbers will exceed ... the official returns of them” provided by the census. 31 *The Writings of George Washington*, John C. Fitzpatrick, ed. 329 (1931) (Exhibit Q).

Yet they and the other Framers, in both the Constitution and the first Census Act, expressly rejected any enumeration based in whole or in part on “estimates,” opting instead for an “actual Enumeration of the whole number of persons.” They did so, moreover, not out of stupidity or naivete, but to minimize the risk of political manipulation in what they knew would always be a politically charged decision, namely, the apportionment of Representations to the U.S. House of Representatives.

For most of the rest of our history, both the Congress and the Census Bureau have respected this fundamental decision, and have therefore avoided including any kind of estimates in the apportionment count. In 1957, for example, in response to a proposal by the Bureau to use a form of random sampling to remedy the “undercount” of traditionally undercounted groups, Congress gave the Bureau permission to use sampling methods for purposes other than the apportionment count. But it added a new provision to the Census Act – Section 195 – expressly prohibiting the Bureau from using “the statistical method known as sampling” for purposes of calculating apportionment. And in 1999, when the Bureau nevertheless attempted to include in the apportionment count a population estimate based on random sampling, the Supreme Court, not surprisingly, held in *House of Representatives* that this decision violated Section 195.

Defendants’ submissions to this Court demonstrate that the Bureau still refuses to accept the decision made by the Framers and consistently enforced by the Congress and the Supreme

Court. To be sure, the Bureau's motive now appears to be scientific purity (or "numerical accuracy") rather than the arguably more laudable policy that animated the sampling procedure struck down in *House of Representatives*, namely, the desire to redress the undercount of traditionally undercounted groups. In fact, Defendants do not contend that this undercount is redressed by the current practice of statistical imputation; they argue only that it generally increases the apportionment count, not that it is aimed specifically at the disparate undercount of minorities.

In any event, regardless of the motive, and regardless of which State would be entitled to a new Representative if that determination were to be based on the State's "real" population (to use Washington's term), the result is the same: The Bureau's imputation methodology, like the random sampling methodology struck down in *House of Representatives*, violates the plain language of both the Census Act and the Constitution because it constitutes an estimate based on statistical sampling techniques rather than an "actual enumeration." Indeed, the Bureau itself conceded in that litigation that "there is no constitutional difference" between the two procedures, and that they are equally indistinguishable under the Census Act. The remainder of this brief responds in detail to the Defendants' various attempts to escape this inescapable conclusion.

Specifically, as shown in Section I, notwithstanding Defendants' contrary arguments, imputation is a method of "sampling" prohibited by Section 195. Defendants' principal attempt to sneak away from this conclusion – by arguing that sampling can occur only at the "data collection" stage, while imputation occurs only at the "data processing" stage – rests on a linguistic trick. In its 1997 report to Congress, the Bureau itself defined "sampling" as a process

that “occurs whenever [a] the information on a portion of a population is used to [b] infer information about unobserved portions of the same population.” Plaintiffs’ Statement of Undisputed Facts (“SUF”) ¶ 24 (quoting A.R. at C00155). Like the random sampling methodology at issue in *House of Representatives*, the “hot-deck imputation” methodology at issue here involves the same two steps. Specifically, it involves [a] the collection of “information on a portion of a population” – the “donor” household used in the imputation process – and [b] the use of that information, at the data processing stage, to infer information about an “unobserved portion[] of the same population” – namely, the dwelling unit (whether verified as such or not) on which the imputation is being performed. Accordingly, viewed as a whole, the “hot-deck imputation” methodology at issue here (like the sampling methodology in *House of Representatives*) clearly implicates both the “data collection” function and the “data processing” function.

Once this red herring is taken off the table, it is apparent that the hot-deck imputation methodology is every bit as much a method of “statistical sampling” as the methodology at issue in *House of Representatives*. The fact that the latter involved “random” sampling while the former involves non-random sampling is immaterial: Congress could easily have limited the language of Section 195 to “random” sampling if it had meant to do so. But it did not, and (absent constitutional problems) the courts do not have authority to read into a statute a limitation that Congress itself did not include. The unpublished district court opinion in *Orr v. Baldridge*, No. IP-81-604-C, slip op. at 5-6 (S.D. Ind. July 1, 1985), was able to do that only because the plaintiffs in that case inexplicably *stipulated* that hot-deck imputation did not violate Section 195.

As shown in Section II, Defendants have likewise failed to wriggle out of the Plaintiffs' earlier showing, and indeed the Bureau's earlier concession, that hot-deck imputation is constitutionally indistinguishable from the procedure at issue in *House of Representatives*. Given the Bureau's flip-flop on that issue, the Bureau's plea for "deference" is understandable. But the Supreme Court has made clear that courts are not to defer to the judgment of an administrative agency on a constitutional question. Here, as four Justices have already concluded in *House of Representatives*, the Census Clause prohibits any and all methodologies that rely upon an "estimate" of a portion of the population, rather than an actual count. As shown below and in Plaintiffs' opening brief, the correctness of that conclusion is amply demonstrated, not only by the textual and historical evidence before the Court in that case, but by a wealth of *additional* evidence from the Founding period – both in the United States and in England.

Among other things, that evidence refutes yet another red herring advanced by the Bureau here: that failing to count someone who cannot be counted is the logical and legal equivalent of *refusing* to count him. The historical evidence shows that the Framers clearly understood that an "actual enumeration" necessarily implied that those who could not be counted would not be included in the count, but that they made a deliberate choice to adopt that method of apportionment rather than any methods which, while perhaps more "accurate," relied upon estimation rather than actual counting.

As shown in Section III, Defendants have not even bothered to dispute (with specific citations to the record) the merits of Plaintiffs' claims under the Administrative Procedure Act. Indeed, they have conceded that, outside the litigation context, the Bureau has never even

attempted to explain to the public or Congress (a) how, if at all, imputation furthers the constitutional goal of equal representation, or (b) how, if at all, they believe that practice can be reconciled with the majority and concurring opinions in *House of Representatives*.

Defendants' various attempts to evade review of those claims are also without merit. For example, Section 209 of the Census Act provides Plaintiffs with a cause of action under the APA, and in so doing specifies that the decision of the Bureau at issue here constitutes "final agency action."

Finally, as shown in Section IV, the laches defense asserted by North Carolina – but not by the Bureau – is legally unavailable in a case such as this that deals with issues of public policy. In all events, the Plaintiffs diligently researched the claim at issue here and asserted it within days of discovering their standing to assert it. Moreover, any delay in litigating that claim is attributable to Defendants themselves, who refused to produce the pertinent data when they were required to do so, and then steadfastly resisted the Plaintiffs' own efforts to expedite consideration of this claim once Plaintiffs asserted it. Thus, if a laches defense were legally available, the doctrine of "unclean hands" would plainly preclude its assertion here.

REPLY TO DEFENDANTS' RESPONSES TO PLAINTIFFS' STATEMENT OF UNDISPUTED FACTS

Defendants' several challenges to the sufficiency of the "foundation" of Plaintiffs' Declarations are based on a mischaracterization of the Declarations. Thus, whereas Defendants assert that "Dr. Wolfson's declaration does not establish that she has any particular knowledge, skill, experience, training, or education in the specific field of imputation," DOJ Br. at 4, the Wolfson Declaration expressly and unmistakably contradicts this assertion. *See* Wolfson Decl. ¶

6 (establishing that a portion of Dr. Wolfson's "work, both as a scholar and as a consultant, has been in the area of statistical techniques for accounting for missing data; in particular, in the use of statistical imputation methods"). Similarly, although Defendants state that "Dr. Wolfson's declaration does not establish that she has any personal knowledge" of the "procedures" used by the Census Bureau, DOJ Br. at 4, her Declaration again provides the precise foundation that Defendants claim is missing. *See* Wolfson Decl. ¶ 10 (establishing that in preparation for her testimony Dr. Wolfson reviewed "(a) population data produced by the Census Bureau in connection with the 2000 census; (b) the process by which the Census Bureau apportions congressional representation after conducting each decennial census; (c) numerous documents detailing the Census Bureau's methods in conducting Census 2000 as well as previous decennial censuses; (d) numerous scholarly articles on methods used in the decennial census; and (e) documents produced by Defendants in response to Plaintiffs' discovery requests."). Moreover, wherever Dr. Wolfson describes the procedures used by the Census Bureau, she cites specific Census Bureau documents that support her description of those procedures.

Defendants also are mistaken in their complaint that Dr. Wolfson relies on the Census 2000 "Report to Congress" (which described the random sampling method struck down in *House of Representatives*) "to describe what actually occurred in Census 2000." DOJ Br. at 5. Dr. Wolfson makes no such use of the "Report to Congress." Instead, she merely quotes portions of the Report insofar as they are relevant to the Bureau's understanding of the meaning of the term "sampling" and of the nature of hot-deck imputation. *See* Wolfson Decl. ¶ 55 (describing the two-step process of sampling, whereby statisticians (1) gather information from a sample, and (2) impute that information to unobserved components of the population). The Census Bureau

understandably wishes to distance itself from its damning descriptions of sampling and of hot-deck imputation in the "Report to Congress," but its misleading attempt to do so by its objection to the Wolfson Declaration must be rejected.

As for the numbered paragraphs in Plaintiffs' Statement of Undisputed Facts, Defendants have offered a number of unsupported objections and interjected extensive legal arguments, but they have not created any material dispute of fact. Thus, because Defendants have not "specifically controverted" Plaintiffs' factual assertions by "identifying material facts of record meeting the requirements of Fed.R.Civ.P. 56," Plaintiffs' numbered facts should be "deemed admitted" under DUCivR 56-1(c).

- 1-2. None of the Defendants disputes these statements.
3. The federal Defendants offer no dispute. North Carolina merely points to "additional legislative history" not cited by Plaintiffs, but make no attempt to dispute Plaintiffs' assertions.
4. None of the Defendants offers any meaningful dispute. The federal Defendants merely object to Plaintiffs' use of the word "supplemented," but that objection clearly does not introduce a material dispute of fact. North Carolina similarly objects only to the way Plaintiffs' statement is phrased and offers no specific dispute of fact.
5. None of the Defendants offers any material dispute. The federal Defendants quibble with the phrasing of Plaintiffs' statement in some respects, but they make no attempt to "specifically controvert" any statements as required under the local rules and in any event they concede that their arguments about phraseology "are immaterial." North Carolina merely offers an evidentiary objection: that paragraphs 5 through 20 of Plaintiffs' SUF "lack a proper foundation" to the extent they are based on the Declaration of Dr. Lara Wolfson ("Wolfson

Decl.”). As demonstrated above, however, the Wolfson Declaration includes extensive foundation. *See* Wolfson Decl. ¶¶ 1-10. (This same objection is North Carolina’s only response to paragraphs 5-20, and for the sake of brevity it will not be repeated below.)

6. None of the Defendants offers any material dispute. The federal Defendants again quibble only with Plaintiffs’ phraseology, but concede that these objections “are immaterial.”
7. No material dispute. The federal Defendants concede that their quarrel with Defendants’ phraseology is “immaterial.”
8. No material dispute. The federal Defendants concede that their quarrel with Defendants’ phraseology is “immaterial.”
9. No material dispute. The federal Defendants concede that their quarrel with Defendants’ phraseology is “immaterial.”
10. No material dispute. The federal Defendants generally assert that Plaintiffs’ statement is “incomplete,” but fail to specifically controvert any statement and concede that this is “immaterial.”
11. No material dispute. The federal Defendants concede that their objection to Plaintiffs’ phraseology is “immaterial.”
12. No material dispute. The federal Defendants argue only that Plaintiffs’ statement is “incomplete,” but they do not specifically controvert any of Plaintiffs’ statements.
13. No material dispute. The federal Defendants offer only the legal argument that imputation is used “to assist in determining, not to estimate, a population count.” This response not only fails to specifically controvert Plaintiffs’ evidentiary showing in the way required by the local rules; it also is undermined by the Bureau’s own documents and its admissions herein. In response to

paragraph 15 of Plaintiffs' SUF, Defendants have conceded that the use of the phrase "'estimates generated by statistical methods' to describe imputation" is "not incorrect." Moreover, the numbers added to the apportionment count through imputation can only be described as estimates. Indeed, the Bureau's own documents reveal that imputation is used to produce estimates, and that the Bureau does not consider imputation to be a traditional method of enumeration. *See e.g.*, U.S. Census Bureau, DSSD Publication # F-1 at 2, 4 (Jan. 3, 1997) (AR at C01461) (distinguishing imputed households from "enumerated households"); *id.* at 4 (AR at C01463) (acknowledging that imputation is used to "add data on persons and housing units *not enumerated* in the census") (emphasis added); Census 2000 Report at 56 (AR C00188) (explaining that imputation is used to "assign values" where "the occupancy status or the number of residents [is] not known for a housing unit").

14. No material dispute. The federal Defendants argue only that Plaintiffs' statement is "incomplete," but they do not specifically controvert any of Plaintiffs' assertions.
15. No material dispute. The federal Defendants argue only that Plaintiffs' "language" is "imprecise," but they do not specifically controvert any of Plaintiffs' assertions and they expressly concede the essence of Plaintiffs' statement. Despite their puzzling objection to "the use of the phrase 'estimates generated by statistical methods' to describe imputation," Defendants' subsequently concede that it is "not incorrect."
16. No material dispute. The federal Defendants quibble with Plaintiffs' use of the term "supplement," but do not specifically controvert any of Plaintiffs' assertions and expressly concede that "imputation has been used in determining the apportionment count in the 1960 census and in subsequent censuses."

17. No material dispute. The federal Defendants argue (1) that Plaintiffs' characterization of the use of imputation in the 1960-1980 censuses is "oversimplified" and (2) that Plaintiffs' characterization of the use of imputation in the 1990 census is incorrect. Because Defendants fail to respond to the facts averred in ¶ 17 with any specificity, however, they have admitted those facts under the local rules.
18. No material dispute. The federal Defendants' only objection here is the puzzling assertion that "the word 'know'" is somehow "vague and ambiguous" in this context. Plaintiffs clearly intended to point out that the Bureau used statistical imputation to add numbers to the apportionment count that represented persons whose existence the Bureau never established. Defendants have not expressly disputed this assertion, and therefore have admitted it under the local rules.
19. No material dispute. The federal Defendants quibble with Plaintiffs' phraseology, but do not specifically controvert any of their assertions and expressly concede the essence of Plaintiffs' assertions. Defendants' legal argument that the imputation does not constitute statistical sampling fails for the reasons set forth in the body of this Memorandum.
20. No material dispute. The federal Defendants' response merely confirms Plaintiffs' statement.
21. No material dispute. All Defendants make only legal arguments regarding the definition of "sampling" under the Census Act, and in any event those arguments fail for the reasons set forth in the body of the Memorandum below.
22. No material dispute. All Defendants make only legal arguments regarding the definition of "sampling" under the Census Act, and in any event those arguments fail for the reasons set forth in the body of the Memorandum below. The federal Defendants also argue that "the Bureau

views imputation as part of its traditional methods of enumeration.” Again, this is legal argument, and in any event the Bureau’s own documents indicate that its use of imputation does not constitute part of the traditional enumeration process. *See e.g.*, U.S. Census Bureau, DSSD Publication # F-1 at 2, 4 (Jan. 3, 1997) (AR at C01461) (distinguishing imputed households from “enumerated households”); *id.* at 4 (AR at C01463) (acknowledging that imputation is used to “add data on persons and housing units *not enumerated* in the census”) (emphasis added); Census 2000 Report at 56 (AR C00188) (explaining that imputation is used to “assign values” where “the occupancy status or the number of residents [is] not known for a housing unit”).

23. No material dispute. The federal Defendants merely complain that the “cited Census Bureau document . . . speaks for itself” and argue that the Bureau’s own documents do not establish that its statistical imputation procedure is a form of statistical sampling. These legal arguments cannot establish a dispute of fact, and in any event they are contradicted by the Bureau’s documents. *See e.g.*, Census 2000 Report at 23 (AR at C00155) (describing the Bureau’s imputation procedure directly under a subheading entitled “Reliance on Sampling in Previous Censuses”). (North Carolina makes the same legal arguments about sampling for paragraphs 22-25, and such arguments cannot create a material dispute of fact.)

24. No material dispute. The federal Defendants argue that the “cited sources” mentioned by Plaintiffs do not establish that the Bureau has acknowledged that “‘sampling’ occurs ‘whenever’ information on a portion of the population is used to infer information about ‘unobserved portions’ of the same population,” but Defendants make no attempt to distinguish those sources and they fail to “specifically controvert” Plaintiffs’ showing in the manner prescribed by the

local rules. In any event, Defendants' response to this paragraph is a legal conclusion, not a factual assertion.

25. No material dispute. The federal Defendants merely offer a legal objection to "Plaintiffs' definition of sampling," and that argument fails for the reasons set forth in the body of the Memorandum below.
26. No material dispute. All Defendants offer only legal argument here. The federal Defendants make only an unsupported assertion that "Plaintiffs' descriptions of sampling and imputation . . . are incorrect." Neither the Hogan Declaration nor the Waksburg Declaration supports that assertion. Also, North Carolina's contention that the Declarations of Drs. Wolfson and Rubin lack a proper foundation amounts to a legal assertion, not a statement of fact. Although North Carolina makes a generalized, conclusory statement claiming that it disputes paragraphs 26-35 of Plaintiffs' SUF "[t]o the extent . . . inconsistent with the Bailar Aff. and Census Bureau Decl.," it has not "specifically controverted" a single fact discussed in those paragraphs, as required under DUCivR 56-1(c). Consequently, North Carolina should be "deemed [to have] admitted" all facts averred in those paragraphs under the local rules. DUCivR 56-1(c).
27. No material dispute. All Defendants offer only legal argument regarding the statutory meaning of "sampling," and they make no effort to specifically controvert Plaintiffs' facts in the way prescribed by local rule.
28. No material dispute. All Defendants offer only legal argument regarding the statutory meaning of "sampling," and they make no effort to specifically controvert Plaintiffs' facts in the way prescribed by local rule.
29. No material dispute. Again, Defendants merely offer legal argument.

30. No material dispute. Defendants' only response is legal argument.
31. No material dispute. Defendants' only response is legal argument.
32. No material dispute. Defendants' only response is legal argument. The federal Defendants generally disagree "that hot-deck imputation differs from the statistical sampling at issue in *House* only in the ways identified by plaintiff," but significantly they offer no other differences.
33. No material dispute. Defendants' only response is legal argument.
34. No material dispute. The federal Defendants assert that hot-deck imputation is not less reliable than other statistical methods, but neither the Hogan Declaration nor the Census Bureau documents cited by Defendants refute the evidence offered by Plaintiffs on this point. *See* Wolfson Decl. ¶¶ 57-61. In any event, Defendants' only response is legal argument.
35. No material dispute. Defendants' only response is legal argument. Moreover, neither the Hogan Declaration nor the Census Bureau documents cited by Defendants refute the evidence offered by Plaintiffs on this point. *See* Wolfson Decl. ¶¶ 57-61.
36. No material dispute. Defendants generally purport to disagree with Plaintiffs' showing, but they do not specifically controvert any of the relevant facts and their own documents support Plaintiffs' showing. Defendants make unsupported assertions that the hot-deck imputation procedure used in the 2000 census (1) was not applied to units not known to exist and (2) should not have resulted in overestimation. The Hogan Declaration, however, does not support that assertion. With respect to the first assertion, the Bureau's own documents suggest otherwise. *See* DOJ Disc. Resp. at 20-21 & Table 3. With respect to the second assertion, Defendants have not established, and indeed cannot establish, that the Bureau's use of imputation did not result in overestimation. Also, North Carolina's conclusory assertion that "[a]pplication of nearest

neighbor hot-deck imputation does not overestimate the population” finds no support in pages C01010-01028 of the Administrative Record. Moreover, North Carolina does not dispute Plaintiffs’ assertion that any errors inherent in the Bureau’s imputation procedure were compounded when the Bureau began using imputing households not known to exist.

37. No material dispute. The federal Defendants’ assertion that the hot-deck imputation procedure used in the 2000 census furthers the accuracy of the census is simply not supported by any evidence. Similarly, the Hogan Declaration does not support the further assertion that failure to use the procedure would be the legal equivalent of “input[ing] zero.” In any event, even if the procedure could be shown to further the accuracy of the census, that fact would not offset the fact its use in the apportionment count violates 13 U.S.C. § 195. North Carolina’s conclusory assertion that the use of imputation “improves the overall accuracy of the census, including the distributive accuracy” is similarly unsupported. North Carolina cites no specific authority in support of this proposition, and instead refers generally – without a single page or paragraph citation – to three declarations, only two of which are even specifically identified (the third being cryptically designated as the “Census Bureau Decl[aration],” although no document bearing that title has been submitted in this case). Because Defendants have not “specifically controverted” the facts averred in this paragraph, those facts should “be deemed admitted for the purpose of summary judgment” under DUCivR 56-1(c).

38. No material dispute. The federal Defendants argue that “numerous studies and analyses” that they belatedly added to the Administrative Record support the Bureau’s decision to use statistical imputation in the 2000 census, but they do not dispute the material facts asserted by Plaintiffs: that the Administrative Record “contains no studies or analyses demonstrating that the expanded

use of imputation would further the census' goal of distributive accuracy," and contains no "analysis of how the . . . considerations addressed in the *House of Representatives* case might impact the Bureau's use of imputation in the 2000 census." In fact, the federal Defendants effectively conceded this point in their response to ¶ 35 in stating that "the Census Bureau focused on achieving numeric accuracy because it is difficult to predict in advance the effect of census operations on distributive accuracy." North Carolina's conclusory assertion that the Administrative Record contains analyses and studies demonstrating that imputation "accurately counts people in appropriate proportions" is similarly unsupported. North Carolina cites no specific authority in support of this proposition, and instead refers generally – without a single page or paragraph citation – to two declarations, only one of which is even specifically identified (the other is cryptically designated as the "Census Bureau Decl[aration]," and no document bearing that title has been submitted in this case). Because North Carolina has not "specifically controverted" the facts averred in this paragraph, those facts should "be deemed admitted for the purpose of summary judgment" under DUCivR 56-1(c).

39. No material dispute. The federal Defendants offer only legal arguments that imputation is part of a traditional enumeration and that imputation does not give the Bureau enormous discretionary control over the allocation of representatives in Congress, thereby providing an opportunity for manipulation. In so doing, the federal Defendants fail to specifically controvert any of Plaintiffs' factual statements or to refute the extensive evidence on this point put forward by Plaintiffs. North Carolina also offers the conclusory argument that there "is no evidence that imputation is a process particularly susceptible to manipulation." North Carolina cites no specific authority in support of this proposition, and instead refers generally – without a single page or paragraph

citation – to three declarations, only two of which are even specifically identified (the third being cryptically designated as the “Census Bureau Decl[aration],” although no document bearing that title has been submitted in this case). Plaintiffs dispute North Carolina’s unspecified suggestion that the factual assertions in paragraphs 39 through 43 of Plaintiffs’ SUF “lack a proper foundation” to the extent they are based on the declarations submitted by Drs. Wolfson and Rubin. This is a legal assertion, not a statement of fact. In any event, any review under the appropriate legal standards reveals that both of those declarations are predicated on an adequate legal foundation. Finally, although North Carolina makes a generalized statement that it disputes the facts averred in paragraphs 39 through 43 “[t]o the extent [they] are inconsistent with the Bailar Aff[idavit] and the Census Bureau Decl[aration],” it does not “specifically controvert[.]” those facts within the meaning of DUCivR 56-1(c). North Carolina therefore has admitted those facts.

40. No material dispute. Again, none of the Defendants specifically controverts any of the evidence put forward by Plaintiffs of the potential for manipulation. Defendants’ legal arguments do not create an issue of fact.
41. No material dispute. Again, none of the Defendants specifically controverts any of the evidence put forward by Plaintiffs of the potential for manipulation. Defendants’ legal arguments do not create an issue of fact.
42. No material dispute. Again, none of the Defendants specifically controverts any of the evidence put forward by Plaintiffs of the potential for manipulation. Defendants’ legal arguments do not create an issue of fact.

43. No material dispute. Again, none of the Defendants specifically controverts any of the evidence put forward by Plaintiffs of the potential for manipulation. Defendants' legal arguments do not create an issue of fact.
44. No material dispute. Defendants do not refute Plaintiffs' factual statement; they offer only legal argument on their view of the meaning of the statutory term "sampling."
45. No material dispute. Defendants do not refute Plaintiffs' factual statement; they merely quibble with the phraseology of whether imputation was used to "add" people to the apportionment count or only to "determine" the apportionment count.
46. No material dispute. The federal Defendants do not refute Plaintiffs' factual statement, and in fact they expressly concede the essential point that "if the 2000 apportionment counts had been calculated without the use of [] imputation, Utah would have been entitled to four seats beginning in 2003." The federal Defendants' only other response is an immaterial quibble with Plaintiffs' phraseology. North Carolina also fail to specifically controvert Plaintiffs' factual statement. North Carolina broadly asserts that "the imputation procedures used by the Census Bureau enhance the accuracy of the census enumeration," but that assertion does not controvert Plaintiffs' statement. Moreover, North Carolina cites no specific authority in support of this proposition, and instead refers generally – without a single page or paragraph citation – to three declarations, only two of which are even specifically identified (the third being cryptically designated as the "Census Bureau Decl[aration]," although no document bearing that title has been submitted in this case). North Carolina's failure to "specifically controvert[]" the facts averred in paragraph 46 of Plaintiffs' SUF is tantamount to an admission of those facts under DUCivR 56-1(c), and should be deemed as such.

47. No material dispute. The federal Defendants make no attempt to controvert Plaintiffs' statement, and in fact they expressly concede that "if the 2000 apportionment counts had been calculated without the use of status imputation, Utah would have been entitled to four seats beginning in 2003." North Carolina also fails to specifically controvert Plaintiffs' factual statement. North Carolina does offer the immaterial argument that imputation of addresses of "unknown occupied/vacant/delete" status creates estimates for "units whose existence has at some time been confirmed." But this is a legal argument, is immaterial, and in any event undisputed evidence in the record indicates otherwise; the mere fact that an address is listed on the Master Address File in no way indicates that it represents (or *ever* represented) an actual housing unit. Moreover, North Carolina's sole source of authority on this point is a document cryptically designated as the "Census Bureau Decl[aration], and no document bearing that title has been submitted in this case. North Carolina's failure to "specifically controvert[]" the facts averred in paragraph 47 of Plaintiffs' SUF is tantamount to an admission of those facts under DUCivR 56-1(c), and should be deemed as such.

**STATEMENT IN RESPONSE TO FEDERAL DEFENDANTS' STATEMENT
OF MATERIAL FACTS NOT IN DISPUTE**

11. Federal Defendants' assertion that households enumerated through "status imputation" are "not fictional or phantom addresses" is a material fact in dispute. As the Bureau's own documents indicate, the Bureau's only basis for imputing these units is that their addresses are found on the Master Address File, which contains numerous addresses that do not even represent housing units, much less units whose existence has been established by anyone with first-hand knowledge. *See* U.S. Census Bureau Memorandum, DSSD D-11 (Nov. 7 2000) (AR C01579)

(“Evidence from an early Master Address File (MAF) extract indicated a potentially large number of housing units and households may have been . . . included in error”.); U.S. Census Bureau Memorandum, DSSD D-13, Dec. 13 2000) (AR C01585) (“addresses are included in the DMAF that do not uniquely identify a housing unit as of April 1, 2000.”); U.S. Census Bureau, “1995 Annual Research Conference: Proceedings” at 261 n.1 (AR at C01417 (explaining that an address on the Master Address File may not represent a “bonafide dwelling,” but may instead refer to a “grocery store” or a “trailer at a construction site serving as a temporary office.”)).

14. Federal Defendants’ assertion that a decision not to impute is tantamount to imputing a value of zero is a material fact in dispute. First, as a practical matter, imputation uses a “statistical method” to “assign values” to unenumerated housing units based on conclusions drawn from a non-random sample, and thereby implicates 13 U.S.C. § 195. *See* DOJ Br. at 21-22 (describing the Bureau’s statistical imputation procedure). By contrast, failure to impute does not. *See* DOJ Br. at 21-22 (describing the Bureau’s statistical imputation procedure). In any event, assigning the value of zero to unverified addresses (instead to assigning a positive value through imputation) would arguably improve the accuracy of the census since many of the addresses on the Master Address File do not represent valid, existing housing units. *See* U.S. Census Bureau Memorandum, DSSD D-11 (Nov. 7 2000) (AR C01579) (“Evidence from an early Master Address File (MAF) extract indicated a potentially large number of housing units and households may have been duplicated or otherwise included in error”.); U.S. Census Bureau Memorandum, DSSD D-13, Dec. 13 2000) (AR C01585) (“addresses are included in the DMAF that do not uniquely identify a housing unit as of April 1, 2000.”); U.S. Census Bureau, “1995 Annual Research Conference: Proceedings” at 261 n.1 (AR at C01417 (explaining that an address on the

Master Address File may not represent a “bonafide dwelling,” but may instead refer to a “grocery store” or a “trailer at a construction site serving as a temporary office.”).

24. Federal Defendants’ assertion that the district court in *Orr v. Baldridge*, No. IP-81-604-C (S.D. Ind. July 1, 1985) “upheld the use of imputation” against the same claim raised in this case is a material fact in dispute. As Defendants concede, “the parties stipulated that imputation was *not* sampling.” DOJ Br. at 35 (emphasis added). Thus, the court in that case cannot be said to have “upheld the use of imputation” under 13 U.S.C. § 195. In any event, this is a legal assertion, and is unpersuasive for the reasons explained in the body of this Memorandum.
25. Federal Defendants’ suggestion that the Bureau imputed households with unclassified “occupied/vacant/delete” status prior to the 2000 census is a material fact in dispute. The Bureau’s own documents indicate otherwise. For example, in a memorandum dated March 8, 1991, Charles D. Jones, Associate Director of the 1990 Decennial Census, explained that in conducting the 1990 census, the Bureau imputed only (a) housing “[u]nits known to be occupied, but for which no population count was collected,” and (b) “[u]nits known to be existing housing units, but for which we did not know the occupancy status . . . or number of persons.” AR at C00682; *see also* Wolfson Decl. ¶¶ 42-44.
31. Federal Defendants’ characterization of the legislative history is not an assertion of fact, but rather a legal argument. Moreover, for the reasons explained in the body of this Memorandum, that characterization is erroneous. *See infra*. Section I(C). Federal Defendants’ assertion that the hot-deck imputation was not the only statistical methodology used in the 2000 census is a disputed material fact to the extent Defendants are suggesting that other statistical methodologies were used to add population estimates to the apportionment count. While it may be true that

“[s]tatistical methods underlie every aspect of a modern nonsampling census,” the record in this case is entirely void of any evidence suggesting that the Bureau used statistical methods other than imputation to add numbers to the apportionment count.

**STATEMENT IN RESPONSE TO NORTH CAROLINA’S
STATEMENT OF ADDITIONAL UNDISPUTED FACTS**

2. North Carolina makes only legal arguments regarding the definition of “sampling” under the Census Act, and in any event those arguments fail for the reasons set forth in the body of the Memorandum below. Moreover, to the extent that those arguments embody factual assertions, they constitute disputed issues of material fact, and are controverted by record evidence. *See* Wolfson Decl. ¶¶ 45-64 (explaining generally that the Bureau’s imputation procedure is a form of statistical sampling, and is similar to the sampling procedures invalidated in *House of Representatives*); Rubin Decl. ¶¶ 21 (explaining that sampling “includes imputation, since imputation involves the process by which the characteristics of the non-sampled units (*e.g.*, the non-enumerated segments of the population) are estimated from the characteristics of the sampled units (the enumerated segments of the population”); *see also id.* ¶¶ 22-25; Census 2000 Report at 23 (AR at C00155) (identifying imputation as the first of several examples of the Bureau’s “Reliance on Sampling in Previous Censuses”); 45 Fed. Reg. 204,69372 (AR at C01219) (suggesting that, in the context of the Census Act, the term “imputation” arguably prohibits the Bureau from using “something less than a complete enumeration,”); NC Br. at 15-16 ¶ 18 (conceding that imputation is based on a “convenience sample”); DOJ Br. at 12 n.21 (describing imputation as a “statistical methodology”).

3. North Carolina makes only legal arguments regarding the definition of “sampling” under the Census Act, and in any event those arguments fail for the reasons set forth in the body of the Memorandum below. Moreover, to the extent those arguments embody factual assertions, they constitute disputed issues of material fact, and are controverted by the record evidence discussed in paragraph 2 above, which Plaintiffs hereby incorporate by reference.
4. North Carolina makes only legal arguments regarding the definition of “sampling” under the Census Act, and in any event those arguments fail for the reasons set forth in the body of the Memorandum below. Moreover, to the extent those arguments embody factual assertions, they constitute disputed issues of material fact, and are controverted by the record evidence discussed in paragraph 2 above, which Plaintiffs hereby incorporate by reference.
5. North Carolina makes only legal arguments regarding the definition of “sampling” under the Census Act, and in any event those arguments fail for the reasons set forth in the body of the Memorandum below. Moreover, to the extent those arguments embody factual assertions, they constitute disputed issues of material fact, and are controverted by the record evidence discussed in paragraph 2 above, which Plaintiffs hereby incorporate by reference.
6. North Carolina makes only legal arguments regarding the definition of “sampling” under the Census Act, and in any event those arguments fail for the reasons set forth in the body of the Memorandum below. Moreover, to the extent those arguments embody factual assertions, they constitute disputed issues of material fact, and are controverted by the record evidence discussed in paragraph 2 above, which Plaintiffs hereby incorporate by reference.
7. North Carolina’s assertion that the Bureau’s use of imputation improves the accuracy of the apportionment count is a disputed issue of material fact, and is contradicted by record evidence.

See Wolfson Decl. ¶¶ 47-53; Rubin Decl. ¶¶ 23-25. In fact, the Administrative Record compiled by Defendants contains evidence suggesting that the Bureau's imputation procedure may be based on flawed statistical assumptions. *See* US Census Bureau Memorandum, "Results of Imputation Run Length Tabulation for Special Study EDs" at 6 (Sept. 20, 1982) (AR at C01252) (explaining that "it may be incorrect to assume that unclassified units in truth have household sizes which are distributed like all other units in the" same neighborhood).

9. North Carolina makes only legal arguments regarding the legislative history of 13 U.S.C. § 195, and in any event those arguments fail for the reasons set forth in the body of the Memorandum below. *See infra*. Section I(C). Moreover, to the extent that those arguments embody factual assertions, they constitute disputed issues of material fact, and are controverted by record evidence. For example, the Census Bureau itself has noted that § 195's legislative history suggests that in using the term "sampling," Congress may have intended to prohibit the use of anything "less than a complete enumeration." 45 Fed. Reg. 204, 69366, 69732 (Oct. 20, 1980) (AR at C01219) (quoting U.S. House of Representatives, Report No. 85-1043 at 10 (1957)). Also, Representative Schroeder explained in discussions preceding the 1976 reenactment of § 195 that the statute "direct[s] the Secretary to use *sampling methods* rather than 100 percent questionnaires whenever feasible." NC Br. at 36 (quoting 121 Cong. Rec. 24, 35171) (emphasis added); *see* DOJ Br. at 44. Like the Census Bureau publication described above, this statement suggests that Congress understood the statute's reference to "the statistical method known as 'sampling'" to refer to all "statistical methods." It does so by referring generally to plural "sampling methods" without limiting such methods to the specific method of "random sampling," and by contrasting such "sampling methods" with actual enumeration by

“questionnaires.” The clear implication is that anything other than an actual enumeration by “100 percent questionnaires” is one of the prohibited “sampling methods.” Again, since it is undisputed that hot-deck imputation is, at a minimum, a “statistical methodology,” DOJ Br. at 12 ¶ 21, and is not an actual enumeration by “questionnaire,” Representative Schroeder’s statement supports Plaintiffs’ position in this case.

10. North Carolina makes only legal arguments regarding the definition of “sampling” under the Census Act, and in any event those arguments fail for the reasons set forth in the body of the Memorandum below. Moreover, to the extent those arguments embody factual assertions, they constitute disputed issues of material fact, and are controverted by the record evidence discussed in paragraph 2 above, which Plaintiffs hereby incorporate by reference.
11. North Carolina makes only legal arguments regarding the legislative history of 13 U.S.C. § 195, and in any event those arguments fail for the reasons set forth in the body of the Memorandum below. *See infra*. Section I(C). Moreover, to the extent those arguments embody factual assertions, they constitute disputed issues of material fact, and are controverted by the record evidence discussed in paragraph 9 above, which Plaintiffs hereby incorporate by reference.
12. North Carolina makes only legal arguments regarding the legislative history of 13 U.S.C. § 195, and in any event those arguments fail for the reasons set forth in the body of the Memorandum below. *See infra*. Section I(C). Moreover, to the extent those arguments embody factual assertions, they constitute disputed issues of material fact, and are controverted by the record evidence discussed in paragraph 9 above, which Plaintiffs hereby incorporate by reference.
13. North Carolina makes only legal arguments regarding the legislative history of 13 U.S.C. § 195, and in any event those arguments fail for the reasons set forth in the body of the Memorandum

below. *See infra*. Section I(C). Moreover, to the extent those arguments embody factual assertions, they constitute disputed issues of material fact, and are controverted by the record evidence discussed in paragraph 9 above, which Plaintiffs hereby incorporate by reference.

14. North Carolina makes only legal arguments regarding the legislative history of 13 U.S.C. § 195, and in any event those arguments fail for the reasons set forth in the body of the Memorandum below. *See infra*. Section I(C). Moreover, to the extent those arguments embody factual assertions, they constitute disputed issues of material fact, and are controverted by the record evidence discussed in paragraph 9 above, which Plaintiffs hereby incorporate by reference.

15. North Carolina makes only legal arguments regarding the legislative history of 13 U.S.C. § 195, and in any event those arguments fail for the reasons set forth in the body of the Memorandum below. *See infra*. Section I(C). Moreover, to the extent those arguments embody factual assertions, they constitute disputed issues of material fact, and are controverted by the record evidence discussed in paragraph 9 above, which Plaintiffs hereby incorporate by reference.

16. North Carolina makes only legal arguments regarding the legislative history of 13 U.S.C. § 195, and in any event those arguments fail for the reasons set forth in the body of the Memorandum below. *See infra*. Section I(C). Moreover, to the extent those arguments embody factual assertions, they constitute disputed issues of material fact, and are controverted by the record evidence discussed in paragraph 9 above, which Plaintiffs hereby incorporate by reference.

17. North Carolina makes only legal arguments regarding the significance and impact of the Supreme Court's opinion in *House of Representatives*, and in any event those arguments fail for the reasons set forth in the body of the Memorandum below. *See infra*. Section I(A) & (B). Moreover, to the extent those arguments embody factual assertions, they constitute disputed

issues of material fact, and are controverted by record evidence. *See* Wolfson Decl. ¶¶ 45-64 (explaining that the Bureau's imputation procedure is a form of statistical sampling, and is similar to the sampling procedures invalidated in *House of Representatives*); *accord* Rubin Decl. ¶¶ 20-25.

18. North Carolina makes only legal arguments regarding the definition of "sampling" under the Census Act, and in any event those arguments fail for the reasons set forth in the body of the Memorandum below. Moreover, to the extent those arguments embody factual assertions, they constitute disputed issues of material fact, and are controverted by the record evidence discussed in paragraph 2 above, which Plaintiffs hereby incorporate by reference.

ARGUMENT

I. STATISTICAL IMPUTATION VIOLATES THE CENSUS ACT

As Defendants correctly observe, "the starting point for interpreting a statute is the language of the statute itself." *Consumer Prod. Safety Comm'n v. GTE Sylvania, Inc.*, 447 U.S. 102, 108 (1980); *see* DOJ Br. at 34. The statutory language at issue here provides that the Census Bureau may not use "the statistical method known as 'sampling'" in enumerating the apportionment population. 13 U.S.C. § 195. This language clearly condemns the use of statistical imputation under the undisputed facts before the Court.

Defendants concede, as they must, that the imputation procedure at issue here is a "statistical method" or "statistical procedure." DOJ Br. at 14, 34. Also, an internal memorandum produced by the Bureau's own statisticians reveals that the "donor" household used in statistical imputation is often referred to as a "sample." *See* James Farber and Richard Griffin, *A Comparison of Alternative Estimation Methodologies for Census 2000* (AR at C01642,

C01644) (“The hot deck is an imputation procedure that has long a history of use . . . in the decennial census. Since nonsampled addresses have completely missing information, the hot deck can be used to fill in that missing data from, for example, the nearest *sampled* address.”) (emphasis added).

In light of the Bureau’s concessions that imputation is (a) a “statistical method” and (b) is designed to produce estimates on the basis of a “sample,” Defendants are hardly in a position to argue that imputation is anything other than statistical sampling. Indeed, although Defendants now seek to distance themselves from such concessions in the heat of this litigation, the Bureau previously (and unambiguously) identified imputation in its report to Congress as the first of several examples of the Bureau’s “Reliance on Sampling in Previous Censuses.”¹ SUF ¶ 23. Defendants now seek to retract these concessions and offer various grounds for excluding statistical imputation from the method of “sampling” proscribed by statute. These arguments must be rejected.

¹ Defendants wrongly accuse Plaintiffs of mischaracterizing key statements in the Census 2000 Report that support the proposition that “the Census Bureau itself has characterized imputation as a method of ‘sampling.’” See DOJ Br. at 42 n.21 (quoting Utah Br. at 3, 12-13). In so doing, Defendants concede that the Report refers to imputation as a “statistical method,” but they fail to mention the critical point that the Report discusses the Bureau’s use of “imputation” directly under a subheading that reads, “Reliance on Sampling in Previous Censuses.” Census 2000 Report at 23 (AR at C00155). Based on the fact that the purpose of the Report was to persuade Congress to accept the Bureau’s sampling proposal, the Bureau obviously intended to give Congress the impression (quite correctly) that “[r]eliance on [s]ampling” in the apportionment count was not without precedent. It is unfortunate that the Bureau refuses to acknowledge that simple fact.

Pointing to another instance in which Plaintiffs cited the Report, Defendants point out that introductory page “x” of the Report does not support the assertion that imputation is a form of statistical sampling. See DOJ Br. at 36 n.17; 42 n.21. Plaintiffs’ citation to that page appears to have resulted from a typographical error. The assertions in question should have referenced the same page discussed in the paragraph above. See AR at C00155.

A. The Bureau's Use of Imputation Violates The Plain Language of Section 195's Prohibition on Sampling.

Although Defendants raise a number of arguments aimed at complicating the straightforward question of statutory construction presented by this case, they ultimately agree with the most basic definition of "sampling" put forward by Plaintiffs: "that 'sampling occurs whenever the information on a portion of a population is used to infer information' about unobserved portions of the same population." SUF ¶ 24 (quoting Census 2000 Report at 23 (AR at C00155)). This definition, in fact, comes from the Census Bureau's own Report to Congress in 1997.

Under this definition, there can be no doubt that the statistical imputation procedure employed in the 2000 census is a method of sampling. It is undisputed that imputation involves the use of information on a portion of the population to infer information about unobserved portions of the same population. Specifically, "information" gathered by census enumerators on one housing unit (or "portion of a population") is used to "infer" information about another housing unit that was not enumerated (an "unobserved portion" of the population).

Defendants' only quarrel with this definition is their occasional assertion that sampling occurs only when the information gathered on a portion of the population is used to infer information about the population "as a whole." But statistical imputation is just as clearly a method of "sampling" under this definition. Statistical imputation uses data collected on a portion of the population to infer information on the population "as a whole." As the Census Bureau itself has argued, the very purpose of imputation is to derive accurate information on the whole apportionment population by "assign[ing] . . . population count[s]" to housing units in instances where the "Bureau is unable to secure any information regarding a given address," or

when it “has some information about the address but not the definitive number of occupants.”

DOJ Br. at 22 ¶ 12.

Indeed, the substance and purpose of statistical imputation is indistinguishable from the random sampling method struck down in *House of Representatives*. Indeed, that is no doubt why the Bureau itself argued in that case that the two methodologies were indistinguishable as a constitutional matter. DOJ HOR Mem. at 26-27 n.20 (Exhibit A). Both methodologies effectively estimate the size of households (and the number of households) not counted by traditional methods of actual enumeration, and accordingly both are equally offensive to the statutory scheme.

Despite this essential similarity between the two methods, Defendants insist that the Bureau’s use of imputation does not violate the Census Act, essentially arguing that § 195’s prohibitive scope extends only to the precise methodology invalidated in *House of Representatives*. Specifically, Defendants maintain that the term “sampling” in § 195 refers only to “activities in the data collection stage” of random sampling, DOJ Br. at 36, and in particular “the *selection* of a [random sample, or] subset of units from a larger population in such a way that each unit of the population has a known chance of selection.” DOJ Br. at 35 (quoting *Orr v. Baldridge*, No. IP-81-604-C, slip. op. at 5 (S.D. Ind. July 1, 1985) (attached to DOJ Br. as Exhibit A)) (emphasis added). Thus, Defendants dismiss imputation as a mere “statistical method,” arguing that the Bureau’s use of imputation is consistent with § 195 because the procedure does not involve the “deliberate selection” of a random sample. *See* DOJ Br. at 34-39; *see also* NC Br. at 43-46; Hogan Decl. ¶ 26; Waksberg Decl. ¶ 10; Peterson Decl. ¶¶ 9-10. This argument fails at every step: the Bureau’s imputation methodology clearly does involve data

“collection” and the “deliberate selection” of a sample, and § 195’s prohibitive scope is not limited to random sampling.

1. Statistical imputation involves both data collection and data processing, as did the random sampling method struck down in *House of Representatives*.

Both Plaintiffs and Defendants refer to a two-step process involved in statistical sampling. *See* Utah Mem. at 13-14; DOJ Br. at 35-36. In the first step, which is sometimes called “sampling,” statisticians collect data by observing a component or “sample” of the population. *Id.* In the second step, referred to as “estimation” or sometimes “imputation,” statisticians use data gathered from the sample to draw conclusions about unobserved components of the population. *Id.*

Because the first step of data collection is sometimes referred to as “sampling,” and the second step is sometimes referred to as “imputation,” Defendants seem to suggest that the two concepts are mutually exclusive. DOJ Br. at 36. Defendants argue, for example, that “the term ‘sampling’ refers to one strategy of data collection and can be said to encompass some or all of the activities in the data collection stage,” but that “imputation . . . is a statistical procedure applied only in the *second* stage, the data processing stage.” *Id.* Thus, in Defendants’ view, “sampling and imputation ‘are two completely different procedures, based upon totally distinct principles and serving equally distinct purposes.’” *Id.*

This argument is misleading and logically untenable. Although “imputation” as a statistical term of art may refer to the “data processing stage” of the process of deriving a statistical estimate, the term “imputation” as used in this litigation is clearly understood to refer to the “nearest-neighbor” or “hot-deck” method of estimating the number of occupants in a

housing unit that is not actually enumerated. Thus, Defendants' argument relies on a linguistic sleight-of-hand in attempting to characterize "imputation" as involving only data processing and not data collection. The only "imputation" at issue here is the specific nearest-neighbor, hot-deck method employed in the 2000 census; Defendants' parsing of "imputation" as a statistical term of art is simply irrelevant and misleading.

Both data collection and data processing clearly are involved in both the nearest-neighbor, hot-deck method employed in the 2000 census and in the Bureau's random sampling proposal struck down in *House of Representatives*. Under the latter proposal, the Bureau planned to (1) *collect* data from a sample consisting of a random selection of households in each neighborhood or "census tract" whose occupants had not been enumerated through traditional enumeration procedures, and (2) *process* that data in order to make conclusions (based on data drawn from the relevant sample) about the occupancy of all unenumerated households in each neighborhood or tract. *See* 525 U.S. at 324. The nearest-neighbor, hot-deck procedure used in the 2000 census involves the same two steps. Under that method, the Bureau (1) *collects* data from a sample consisting of a single enumerated household, and (2) *processes* that data in order to make conclusions (based on data drawn from the sample) about the occupancy of a single unenumerated household in the same neighborhood.

Accordingly, Defendants' notion that the "sampling" prohibited by § 195 is limited to methods of "data collection" is nonsensical and in any event implicates the nearest-neighbor, hot-deck method employed in the 2000 census. Indeed, it is impossible to conceive of a method of "sampling" relevant to an assessment of the population that would not involve both steps, and accordingly Defendants' linguistic distinction must be rejected.

2. The Bureau's Use of Imputation in the 2000 Census Involved a Deliberate Selection of Housing Units.

To the extent Defendants are arguing that § 195 extends only to sampling procedures in which the sampled units are “deliberately” or “purposefully” selected,² *see* DOJ Br. at 13, 37, 38 (suggesting that imputation does not constitute sampling because it does not involve a “sample selection mechanism”); *accord* Waksberg Decl. ¶ 10; Hogan Decl. ¶ 26; hot-deck imputation surely fits that description. Indeed, throughout their own documents, Defendants acknowledge the deliberate nature with which the Bureau selected or “sampled” the donor housing units used in the imputation process in the 2000 census.

For example, in response to one of Plaintiffs’ interrogatories, Defendants described the care with which the sampled units are selected, explaining that unlike the imputation procedures used in previous census, those used in the 2000 census “selected the donor housing units only from the universe of housing units that had their questionnaire completed by an enumerator, rather from the universe of all housing units.” DOJ Supp. Disc. Resp. at 14; *see also* DOJ Br. at 13-14 ¶ 31; AR C00862. Also, “if possible, the donor and the donee were both from a single unit structure or a multi-unit structure.” DOJ Supp. Disc. Resp. at 14.; *see also* DOJ Br. at 13-14 ¶ 31; AR C00862. According to Defendants, the Bureau made these changes because (1) “housing units in the follow-up universe are generally more similar to each other than to housing units that mail back their returns,” and (2) “households in single unit structures are more similar to each other than to those in multi-unit structures.” DOJ Supp. Disc. Resp. at 14.; *see also* DOJ

² Defendants’ position on this point is not entirely clear. In fact, nowhere in their Memorandum do Defendants identify a precise list of the characteristics that, in their view, distinguish a mere “statistical procedure” – which they suggest the Bureau can use at will – from a “statistical sampling procedure.”

Br. at 13-14 ¶ 31; AR C00861-62. Thus, if the imputation procedures used in the 2000 census do not involve the deliberate selection of a sample, it is difficult to imagine what does.

3. Section 195's Prohibition on "Sampling" is Not Limited To Random Sampling.

Finally, Defendants' suggestion that the term "sampling" refers only to random sampling simply cannot be reconciled with the text of the statute.

First, in no uncertain terms, and without qualification, § 195 prohibits the Bureau from using "the statistical method known as 'sampling'" in conducting the apportionment count. Congress certainly could have inserted the word "random" before "sampling," but it did not. It is therefore improper for Defendants to ask this Court to re-write the statute so that it reflects their own self-serving interpretation.

Indeed, the interpretive issue in this case falls within the familiar rule that, when Congress uses a particular term of art, but does not narrow its operative meaning by inserting a limiting clause or term, courts are without authority to re-write the statute by inserting the limiting language themselves. *See e.g., EEOC v. Arabian American Oil Co.*, 499 U.S. 244, 255 (1991) (rejecting an argument that the term "employer," as used in Title VII, "means only, 'American employer'"); *see also* Norman J. Singer, *Statutes and Statutory Construction* § 46:06 at 192 (rev'd. 2000) ("*Statutory Construction*") (explaining that just as "every word of a statute must be presumed to have been used for a purpose . . . every word excluded from a statute must be presumed to have been excluded for a purpose").

Likewise, the Bureau's own documents undermine Defendants' narrow reading of the term "sampling." As the Bureau explained in its 2000 Census Report, "'sampling' occurs whenever the information on a portion of the population is used to infer information on the

population as a whole.” See AR at C00155. In the same document, the Bureau further explained that even “[a]mong professional statisticians, the term ‘sample’ is reserved for instances when the selection of the smaller population is *based on the methodology of their science.*” *Id.* (emphasis added).

These definitions are entirely void of *any* suggestion that the term “sampling” – as used either in common parlance or by statisticians – refers only to “random sampling.” Consequently, they refute the accuracy of Defendants’ current position, which they attempt to bolster through their experts, that § 195 prohibits only the use of random sampling. See DOJ Br. at 33-34, 37-38; Waksberg Decl. ¶¶ 6-11; Hogan Decl. ¶ 30. In fact, Defendants’ position is refuted by standard statistics texts, including one that specifically identifies a method of imputation as a form of sampling. See Frank Yates, *Sampling Methods for Censuses and Surveys* at 1 (Charles Griffin & Co. 1953) (discussing various methods of selecting a “sample” and citing the method of “substitution”—which is another name for statistical imputation—as such a method, and pointing out that surveyors “often substitute another convenient member of the population when difficulties are encountered in obtaining information”); see also W. Paul Vogt, *Dictionary of Statistics and Methodology: A Nontechnical Guide for the Social Sciences* (Sage Pub’s. 1993) (defining “quota sample” as “[a] stratified *nonrandom* sample, that is, a sample selected by dividing a population into categories and selecting a certain number (a quota) of subjects from each category. Individual subjects within each category are not selected randomly; they are usually chosen on the basis of convenience.”).

If Defendants’ crabbed reading of the Census Act were adopted, it would essentially nullify § 195 as construed in *House of Representatives*. By authorizing the Bureau to add

statistically derived estimates to the apportionment count so long as those estimates were not based on a random sample, Defendants' interpretation would create a complete end-run around § 195. Stated differently, under Defendants' reading of the statute, the Bureau could use any sample it wanted to estimate any segment of the population, so long as that sample did not consist of a randomly selected subset of the segment being estimated. Thus, if the Bureau determined, for example, that the residents of Pomona, California exhibited similar characteristics to those of Fargo, North Dakota, it could use data drawn from a sample of Fargo residents to estimate the occupancy of unenumerated households in Pomona.

Like the imputation procedure at issue here, this hypothetical procedure unquestionably constitutes a form of statistical sampling. But under Defendants' unreasonably narrow reading of 13 U.S.C. § 195, both of these procedures could lawfully be used to supplement the apportionment count with statistically derived estimates of unenumerated segments of the population. Defendants' construction of § 195 therefore fails because it is inconsistent with the policy objective evident on the face of the statute, *i.e.*, the desire to prevent the decennial census from becoming vulnerable to manipulation.³ See *FEC v. Democratic Senatorial Campaign Committee*, 454 U.S. 27, 32 (1981) (explaining that a reviewing court "must reject administrative constructions of [a] statute . . . that are inconsistent with the statutory mandate or that frustrate the policy that Congress sought to implement"); *Sutherland on Statutory Construction* § 45:12 at

³ In any event, the Bureau's own documents show that, although hot-deck imputation is not based on a random sample, it is designed to "reproduce the random quality of the missing items." *Multivariate Item Imputation for the 2000 Census Form* at 371 (AR at C01716). Thus, it makes little difference whether the Bureau's statistical estimates are based on an aggregated, randomly drawn sample or on an individualized, non-random sample. The resulting estimates, like the accompanying breach of the Census Act, are the same either way.

81 (explaining that “when one of several possible interpretations produces an unreasonable result, that is reason for rejecting that interpretation in favor of another”).

In apparent recognition of the fact that their “random sampling” theory finds no support in the statute or in logic, Defendants seek refuge under the gauze umbrella of *Orr v. Baldridge*, No. IP-81-604-C, slip op. at 5-6 (S.D. Ind. July 1, 1985) (attached to DOJ Br. as Exhibit A). In *Orr*, the State of Indiana filed a lawsuit challenging the Census Bureau’s use of imputation after it narrowly lost a congressional seat to Florida. The court in that case entered summary judgment in the Bureau’s favor, endorsing essentially the same reading of § 195 now advanced by Defendants. *See* DOJ Br. at 35-37. As Defendants point out, however, Indiana *stipulated* that imputation was not a method of sampling within the meaning of § 195. Therefore, entirely aside from the fact that it was wrongly decided, and cannot be reconciled with the plain language of the Census Act, *Orr*’s discussion of the validity of imputation under § 195 was pure *dicta*, and was issued without the benefit of the kind of thoughtful legal analysis that can be procured only in an adversarial proceeding. Consequently, Defendants’ reliance on *Orr* is misplaced.⁴

B. Defendants’ Attempt To Distinguish *House of Representatives* Is Unpersuasive

⁴ Similarly misplaced is Defendants’ reliance on a quote taken out of context from an affidavit submitted in that case by Dr. Donald Rubin, one of the current Plaintiffs’ expert witnesses. *See* DOJ Br. at 37. Defendants point to the fact that Dr. Rubin agreed generally with a definition of sampling – supplied by the Census Bureau in its answers to the plaintiffs’ interrogatories – that arguably suggests that the term refers only to random or “probability” sampling. *See* DOJ Br. at 37 (quoting AR at C01167-68). In fact, however, the agreed-upon definition merely suggests that survey sampling applications are more frequently based on random or “probability” samples than on non-random samples—a fact that may be true but has no bearing on whether non-random samples also constitute “sampling.” In any event, the *Orr* plaintiffs had already conceded (quite needlessly) that imputation did not constitute “sampling” under § 195. *See* DOJ Br. at 37 (quoting AR at C01167-68). Consequently, the precise scope of § 195 was not at issue, and Dr. Rubin cannot be assumed to have had that issue in mind when he issued the affidavit.

Recognizing the obvious threat that the Supreme Court's ruling presents to their use of imputation, Defendants purport to identify a number of other grounds for distinguishing hot-deck imputation from the random sampling methodology struck down in *House of Representatives*. Specifically, the Bureau points out that the plaintiffs in *House of Representatives* sought to distinguish imputation from the sampling procedures challenged in that case, asserting⁵ that the former (1) is used "in circumstances where an enumerator knows that particular units are occupied," (2) "has been applied only as a last resort," and (3) "always with respect to a specific housing unit based on physical evidence." DOJ Br. at 41 (citing Plaintiffs' Memorandum in Support of MSJ in *House of Representatives* (attached to DOJ Br. as Appendix I)). Ironically, in that same litigation the Bureau itself argued that "there is *no constitutional* difference . . . between sampling and the imputation methodology." *Id.* (citing the Bureau's opposition in that case, at p. 27 n. 20). And none of these supposed distinctions is any more material under the Census Act than they are under the Constitution.

With respect to the first assertion, the plaintiffs in *House of Representatives* were simply wrong to suggest that imputation is used "only in circumstances where an enumerator knows a particular unit is occupied," and Defendants are fully aware of that fact. Indeed, the Bureau's own documents indicate that it uses imputation to estimate not only housing units whose occupancy has not been established, but also supposed dwelling units whose *existence* has not been established. *See* AR at C00155, C00973, C00859; *accord* DOJ Disc. Resp. at 15-22; DOJ Br. at 22 ¶ 12; Utah Br. at 8-9 ¶ 13.

⁵ Curiously, Defendants never specify why the Court should be persuaded by the material quoted from the summary judgment brief filed by the plaintiffs in *House of Representatives*, *see* DOJ Br. at 40-41, so Plaintiffs are left to guess at the intended purpose of this argument.

The Bureau tries to sneak away from this conclusion by claiming that it is not, after all, using “phantom addresses” for imputation purposes. DOJ Br. at 22 ¶ 12. But that, of course, is not the issue. Defendants do not dispute that the Bureau often uses addresses for imputation purposes without even knowing whether those addresses correspond to an actual, occupied dwelling unit. Indeed, the Bureau concedes that imputation is used even where the Bureau has “insufficient information about whether [a particular] address represents a valid . . . housing unit,” as long as the address is in the Bureau’s Master Address File. DOJ Br. at 22 ¶ 12. But the Bureau does not dispute that the mere fact that a particular address is on the Master Address File cannot be taken as credible evidence that that the address represents a housing unit. Indeed, as former Census Bureau Director Prewitt acknowledged before the House Subcommittee on the Census, some of the addresses on the Master Address File may not even represent *housing units*, much less occupied ones. *See* Prewitt June 22 Testimony at 57 (“We have apartment complexes – I visited one the other day, for example – where we had not gotten a response from unit 101, 102, 103, and then 201, 202, and then 306. And I went with the enumerator and we went to that complex. Well, 101, 102, and 103 were storage bins. They *look like addresses*, but they were storage bins.”) (emphasis added). Indeed, the Administrative Record is replete with documents undermining Defendants’ suggestion that it is reasonable to assume that nonresponding addresses likely represent valid, occupied households. *See also* U.S. Census Bureau Memorandum, DSSD D-11 (Nov. 7 2000) (AR C01579) (“Evidence from an early Master Address File (MAF) extract indicated a potentially large number of housing units and households may have been duplicated or otherwise included in error”.); U.S. Census Bureau Memorandum,

DSSD D-13, Dec. 13 2000) (AR C01585) (“addresses are included in the DMAF that do not uniquely identify a housing unit as of April 1, 2000.”).

Second, the fact that imputation “has been applied only as a last resort” does not distinguish this case from *House of Representatives*, nor does it suggest in any way that its use in the apportionment count can be reconciled with § 195. Indeed, in *House of Representatives*, the Court rejected the substantively identical proposition that sampling could be used not as a substitute for traditional enumeration methods, but as a supplement thereto. *See* 525 U.S. at 342 (“Whether used as a ‘supplement’ or as a ‘substitute,’ sampling is still used in ‘determining’ – that is, in ‘the act of deciding definitely and firmly.’”) (quoting Webster’s Ninth New Collegiate Dictionary 346 (1983)).

The assertion that the Bureau uses imputation “always with respect to a specific housing unit based on physical evidence” also fails to distinguish imputation from the procedures proposed in the Bureau’s failed sampling plan, or otherwise insulate imputation from § 195’s prohibition on sampling. In *House of Representatives*, Defendants themselves argued before the district court that imputation is not based on “physical evidence.” *House of Representatives*, Defendants’ Memorandum in Opposition to Summary Judgment (DOJ HOR Mem.”) at 27 n. 20 (attached as Exh. A). In any event, depending on how broadly one defines these terms, the proposed sampling at issue in *House of Representatives* arguably would have been based on “physical evidence” taken from a sample.

As for the fact that hot-deck imputation produces population estimates on a “one-house-at-a-time” basis, this distinction surely cannot affect that procedure’s status as a sampling procedure. From a mathematical standpoint, there is no meaningful distinction between a

procedure that uses an aggregated sample to estimate the size of a larger population, and one that uses individual samples to estimate the size of individual subunits of the same population. The former involves a process of multiplying an average number of persons per household times the number of unenumerated housing units. The latter involves the addition of the estimated numbers assigned to each unenumerated housing unit.

Mathematically, the two approaches are identical. Assume that the total number of housing units is 100, that 90 of them are enumerated, and that the enumerated population is 360. The random, aggregated sampling approach will estimate that the total population is 400 by multiplying the total number of unenumerated units (10) by the average number of occupants (4), and then by adding that estimate (40) to the enumerated population (360). A non-random, individualized sampling approach would also estimate the total population, but it would do so by estimating the size of each of the 10 unenumerated housing units one at a time and adding the total together. If a “nearest-neighbor” approach is used, some of the 10 units might be estimated to have 3 occupants and others might be estimated to have 5 occupants, but the addition of the estimates for all 10 unenumerated units would (on average) yield the same result of 40, which would be added to the enumerated population to yield an estimate of the total population of 400.

Both approaches constitute sampling in the sense that they involve (1) collecting data from observed units of the population, and (2) using that data to make assumptions about unobserved units of the same population. *See* Utah Br. at 14 n.26; Wolfson Decl. ¶ 45-46; Rubin Decl. ¶ 11, 21, 23. The fact that one involves addition, and the other multiplication (which is simply a collection of additions), surely cannot suggest that Congress intended to condemn the former and condone the latter.

Finally, it is ironic that Defendants now quote arguments first raised by the plaintiffs in *House of Representatives* in an attempt to distinguish imputation from the sampling procedures at issue in that case, especially since Defendants initiated the dialogue on the similarities between the two. In their Memorandum in Opposition to Summary Judgment before the district court, that “there is no constitutional difference exists [sic] between sampling and the imputation methodology,” reasoning that “[n]either provides the type of evidence that the House now contends is the only kind upon which the Bureau may constitutionally rely: physical, headcount evidence.” DOJ HOR Mem. at 27 n.20 (emphasis in original). In light of the fact that the Bureau itself has interpreted the § 195 as codifying the constitutional requirement that the apportionment count be based on an “Actual Enumeration,” *see* 45 Fed. Reg. 69366, 69372 (1980) (AR at C01219), Defendants’ admission that there is “no constitutional difference” between imputation and the type of sampling that violates § 195 also suggests that the Bureau’s use of imputation violates the Census Act.

C. The Legislative History of Section 195 Supports Plaintiffs’ Reading of the Statute.

Defendants next contend that § 195’s legislative history indicates that the word “sampling” was intended to refer only to the narrower concept of “random sampling.” DOJ Br. at 41; *see also* NC Br. at 32. This argument fails first for the reasons set forth above—that the plain language of § 195 clearly extends to all forms of sampling and not just the narrow notion of random sampling. Where (as here) the plain language of the statute is clear, it is simply unnecessary to examine the statute’s legislative history. *See e.g., Consumer Prod. Safety Comm’n v. GTE Sylvania, Inc.*, 447 U.S. 102, 108 (1980). In any event, the legislative history

disproves Defendants' argument that Congress meant to limit the sampling prohibited by statute to random sampling.

A House Report issued at the time of the statute's 1957 enactment indicates, for example, that Congress enacted § 195 in an effort to prohibit the Bureau from using anything "less than a complete enumeration" in conducting the apportionment count. U.S. House of Representatives, Report No. 85-1043 at 10 (1957) (quoted in AR at C01219). That report stated that "[t]he purpose of section 195 in authorizing the use of sampling procedures is to permit the utilization of *something less than a complete enumeration*, as implied by the word 'census,' when efficient and accurate coverage may be effected through a sample survey. Accordingly, *except with respect to apportionment*, the Secretary of Commerce may use sampling procedures when he deems it advantageous to do so." *Id.* Even under the crabbed definition adopted by Defendants, hot-deck imputation is a statistical procedure used to estimate the occupancy of unenumerated households, and therefore clearly constitutes "something less than an enumeration."

Moreover, as Defendants themselves indicate, Representative Schroeder explained in discussions preceding the 1976 reenactment of § 195 that the statute "direct[s] the Secretary of Commerce to use *sampling methods* rather than 100 percent questionnaires whenever feasible." NC Br. at 36 (quoting 121 Cong. Rec. 24,35171) (emphasis added); *see* DOJ Br. at 44. Like the House Report described above, this statement suggests that Congress understood the statute's reference to "the statistical method known as 'sampling'" to refer to all "statistical methods." It does so by referring generally to plural "sampling methods" without limiting such methods to the specific method of "random sampling," and by contrasting such "sampling methods" with actual enumeration by "questionnaires." The clear implication is that anything other than an actual

enumeration by “100 percent questionnaires” is one of the prohibited “sampling methods.”

Again, since it is undisputed that hot-deck imputation is, at a minimum, a “statistical method” and is not an actual enumeration by “questionnaire,” Representative Schroeder’s statement supports Plaintiffs’ position in this case.

At a minimum, the legislative history is entirely void of any suggestion that the provision was intended to prohibit only the use of “random sampling,” and not the broader category of “sampling” that the statute expressly proscribes. Defendants’ contrary argument converges around two interrelated points, neither of which has any merit.

First, Defendants argue that the legislative history indicates that § 195 “was passed at the request of the Census Bureau and that the Bureau understood sampling to mean the method of examining a small portion of the population to derive information on the whole.” DOJ Br. at 43 (emphasis added).⁶ While it may be true that § 195 was “passed at the request of the Census Bureau,” the Bureau’s understanding of the statute’s prohibitive scope is utterly irrelevant to whether it prohibits the use of non-random sampling. To the extent it is even necessary to make any inquiry into § 195’s legislative history, such an examination should focus on evidence of *Congress’s* intent, and not that of the Bureau.

⁶ In support of this proposition, Defendants quote two isolated instances in which Census Bureau Director Robert Burgess mentioned sampling in his 1957 testimony before a subcommittee of the House Committee on Appropriations, in which Burgess referred once to a “25-percent sample,” and once to a “10 percent sample.” See DOJ Br. at 43. They also point out that prior to the statute’s 1976 reenactment (1) Representative Pat Schroeder referred to a “25 percent . . . sample survey” to be conducted in connection with the mid-decade census, DOJ Br. at 44, and (2) Census Bureau director Vincent Barabba noted that “[i]n a sample survey, a sample is selected.” DOJ Br. at 44. Defendants fail to explain how these unremarkable statements and non-exclusive “examples” of sampling support their case, much less the puzzling (yet ultimately unavailing) proposition that “the Bureau understood sampling” to refer only to “the method of examining a small portion of the population to derive information on the whole.” DOJ Br. at 43.

Moreover, even if the statute's legislative history showed that Congress in fact "understood sampling" to refer only to "the method of examining a small portion of the population to derive information on the whole," DOJ Br. at 43 (which is incorrect for reasons explained above), that fact would not insulate the Bureau's imputation procedure from the Census Act's prohibition of statistical sampling. As explained above, from a statistical standpoint, there is no meaningful distinction between a procedure that uses an aggregated, randomly drawn sample to estimate the size of a larger population, and one that uses individual, non-randomly drawn samples to estimate the size of individual subsets of the same population. Both procedures constitute statistical sampling.

Second, Defendants suggest that Congress has given imputation its tacit approval by its inaction in the face of the Census Bureau's reports to Congress and by Congress's 1976 decision to reenact § 195 "significant change." *Id.* at 44 & 48. These arguments cannot withstand scrutiny under the applicable legal standard, which Defendants conveniently fail to mention. Courts have long held that Congress's failure to enact or amend legislation to overturn an agency's interpretation of a particular statute does not endow that interpretation with the force of law. *See e.g., Central Bank of Denver, N.A. v. First Interstate Bank of Denver*, 511 U.S.164, 187 (1994) (explaining that congressional silence "lacks persuasive significance,") (quoting *Pension Benefit Guaranty Corp. v. LTV Corp.*, 496 U.S. 633, 650 (1990)). In large part, these cases are based on an understanding of the fact that the congressional decision making process is a complex one, and that Congress may act or fail to act for a variety of reasons, many of which carry no legal significance. *See e.g., Zuber v. Allen*, 396 U.S. 168, 185-86 n.21 (1969) ("The verdict of quiescent years cannot be invoked to baptize a statutory gloss that is otherwise

impermissible. . . . Congressional inaction frequently betokens unawareness, preoccupation, or paralysis”).

Moreover, it is well settled that when Congress reenacts a statute without changes, it does not thereby automatically adopt an agency’s understanding of the statutory language. In fact, where “the record of congressional discussion preceding reenactment makes no reference to” an agency’s “interpretive position” concerning the statute’s application to agency action, courts consider the “re-enactment to be without significance.” *Brown v. Gardner*, 513 U.S. 115, 121 (1994) (quoting *United States v. Calamaro*, 354 U.S. 351, 358 (1957)). Thus, in the absence of “widespread congressional awareness” of an “administrative construction of an agency’s own enabling legislation,” courts will not presume that the re-enactment of that legislation is “tantamount to an amendment” adopting the agency’s construction. *SEC v. Sloan*, 436 U.S. 103, 120-21 (1978) (“We are extremely hesitant to presume general congressional awareness of [an agency’s] construction based only upon a few isolated statements in thousands of pages of legislative documents”); see also *Investment Company Institute v. Camp*, 401 U.S. 617, 627 (1971).

There is nothing in the record before the Court or elsewhere that suggests that “the record of congressional discussion preceding [§ 195’s] reenactment” makes any reference to an “interpretive position” of the Bureau regarding the issue of whether statistical imputation was reconcilable with § 195’s prohibition of sampling. *Brown v. Gardner*, 513 U.S. at 121. Accordingly, Congress’s inaction can hardly insulate the Census Bureau from judicial scrutiny of its failure to comply with the express terms of the Census Act.

D. Defendants’ Construction of Section 195 Is Not Entitled To Deference.

Finally, Defendants contend that the because the Bureau has interpreted § 195 as prohibiting only random sampling, “the Census Bureau’s interpretation of the Act is further entitled to substantial deference” under *Chevron U.S.A., Inc. v. National Resources Defense Council*, 467 U.S. 837 (1984). See DOJ Br. at 42. This argument is similarly misplaced.

First, as with Defendants’ legislative history argument, this argument fails in light of § 195’s unambiguous proscription of *any* form of statistical sampling. Because the “the plain language of [the statute] clearly demonstrates Congress’s intent,” the Census Bureau’s construction of the statute is simply not entitled to any deference, and the Court’s construction of the statute’s plain language must prevail over any contrary agency interpretation. *Tapia Garcia v. INS*, 237 F.3d 1216, 1220 (10th Cir. 2001) (citing *Chevron*, 467 U.S. at 842-43).⁷

Second, Defendants’ claim of an entitlement to deference also fails for the additional reason that the Bureau’s reading of § 195 can at most be described as the kind of “interpretation” which – like “opinion letters . . . policy statements, agency manuals, and enforcement guidelines,” and unlike formal rules, regulations, and adjudicative decisions – “lack[s] the force of law,” and therefore “do[es] not warrant *Chevron*-style deference.” *Christensen v. Harris County*, 529 U.S. 576, 587 (2000); accord *United States v. Mead Corp.*, 121 S.Ct. 2164, 2171 (2001). While agency interpretations “are entitled to respect” to the “extent that [they] have the ‘power to persuade,’” *Christensen*, 529 U.S. at 587 (quoting *Skidmore v. Swift & Co.*, 323 U.S. 134, 140 (1944)), they are “not controlling upon the courts by reason of their authority.”

⁷ Thus, while Defendants correctly point out that the Census Act grants the Bureau “broad authority . . . in determining the ‘form and content’ of the census,” DOJ Br. at 42 (quoting *Wisconsin*, 517 U.S. at 23), they are mistaken in their assumption that such authority entitles them to deference where, as here, they have acted in a manner inconsistent with the plain language of the Act.

Skidmore, 323 U.S. at 140. The persuasive value of Defendants' reading of § 195 is negligible, and cannot justify setting aside the clear language of the statute.

Indeed, it is of particular significance here that, outside the context of litigation,⁸ the Bureau has never "expressly articulated [a] position at the administrative level as to the meaning and impact of" § 195, and accordingly never "satisfied [itself] that the exercise of [its] authority" to use statistical imputation in the apportionment count "w[ould] not violate the" Census Act.⁹ *Investment Company Inst. v. Camp*, 401 U.S. 617, 627, 628 (1970) (invalidating a regulation that was "promulgated . . . without opinion or accompanying statement" explaining the regulation's validity under an arguably contradictory, but nevertheless controlling, statute).

But even to the extent that it has articulated a clear position on the meaning of § 195, the persuasive value of that position is diminished by the Bureau's own inconsistencies. *See e.g.*

⁸ Defendants have rendered formal (albeit inconsistent) interpretations of § 195 in three different lawsuits: (1) in *Orr v. Baldrige* (S.D. Ind. No. IP-81-604-C), where they argued that § 195 prohibits the use of random, probability sampling in the apportionment count; (2) in *House of Representatives*, where they took the position that § 195 contains no prohibition against sampling, but (a) failed to explain the inconsistency between that interpretation and the one they embraced in *Orr*, and (b) argued that "there is no constitutional difference . . . between sampling and the imputation methodology," DOJ HOR Mem. at 27 n. 20 (attached as Exh. A.); and (3) in the case at bar, where they advance an interpretation similar to the one they adopted in *Orr*, but still refuse to explain any basis for their earlier inconsistencies. But even if their litigating positions had been consistent, they would not advance Defendants' case on this point, since it is well established that positions adopted in the context of litigation are not entitled to deference. *See Bowen v. Georgetown Univ. Hosp.*, 488 U.S. 204, 213 (1988) ("Deference to what appears to be nothing more than an agency's convenient litigating position would be entirely inappropriate."); *accord Securities Industry Ass'n. v. Board of Governors of the Federal Reserve System*, 468 U.S. 137, 143-44 (1984); *Motor Vehicle Mfrs. Ass'n. of the United States v. State Farm Mutual Auto. Ins. Co.*, 463 U.S. 29, 50 (1983).

⁹ As explained in greater detail above, moreover, Defendants' position is further weakened by the fact that in 1980 the Bureau published a statement in the Federal Register interpreting § 195 to continue the "historical precedent of using the 'actual Enumeration' for purposes of apportionment, while eschewing estimates based on sampling *or other statistical procedures*, no

EEOC v. Arabian American Oil Co., 499 U.S. 244, 257-58 (1991) (explaining that an agency significantly diminishes the persuasive value of its interpretation of a particular statute where, as here, it adopts one position, and then embraces a completely different one without explaining the inconsistency). For example, in 1980 the Bureau published a statement in the Federal Register interpreting § 195 to continue the “historical precedent of using the ‘actual Enumeration’ for purposes of apportionment, while eschewing estimates based on sampling *or other statistical procedures*, no matter how sophisticated.” See 45 Fed. Reg. 69366, 69372 (1980) (AR at C01219) (emphasis added).¹⁰ In spite of the fact that this statement obviously contradicts the Bureau’s current position, the Bureau has never retracted this interpretation. Nor has it made any attempt to reconcile that interpretation with the Bureau’s use of imputation, which the Bureau admits is a “statistical procedure” used to add “estimates” to the apportionment count.¹¹ See DOJ Br. at 36 (explaining that “imputation . . . is a ‘statistical procedure’”); Testimony of Census

matter how sophisticated.” See 45 Fed. Reg. 69366, 69372 (1980) (AR at C01219) (emphasis added).

¹⁰ Although the same document obliquely referred to the Bureau’s use of “substitution” (one of the many terms the Bureau has used to describe statistical imputation), it failed to disclose the fact that “substitution” is a “statistical procedure” used to produce estimates included in the apportionment count, and never addressed the legality of using the procedure in the conduct of the apportionment count in light of 13 U.S.C. § 195. See AR at C01220.

¹¹ This fact makes the Bureau’s failure to comply with section 209(j) of Pub. L. 105-119 (that is, by immediately releasing data regarding the number of persons added to the apportionment count through “statistical methods,” including imputation) even less defensible. Defendants argue that the Bureau’s non-compliance was justified insofar as it “was consistent with the Census Bureau’s treatment of imputation as part of the traditional enumeration process,” DOJ Br. at 47, but this assertion is specious. The Bureau’s internal “treatment of imputation” cannot justify its failure to comply with an unambiguous provision of the law. Moreover, this argument is based on a faulty factual assumption; the Bureau’s own documents reveal that it does not consider imputation to be a traditional method of enumeration. U.S. Census Bureau, DSSD Publication # F-1 at 2, 4 (Jan. 3, 1997) (AR at C01461) (distinguishing imputed households from “enumerated households”); *id.* at 4 (AR at C01463) (acknowledging that imputation is used to “add data on persons and housing units *not enumerated* in the census”) (emphasis added).

Bureau Director Kenneth Prewitt before the House Subcommittee on the Census, Committee on Government Reform at 33 (June 22, 2000) (describing imputation as “a process of trying to get the *estimate of the count* closer to the truth”) (emphasis added).

There can thus be no doubt that the Bureau’s current construction of § 195 is *not* the kind of interpretation that, while not entitled to deference under *Chevron*, ought to be considered for its persuasive value. *See Mead*, 121 S.Ct. at 2171 (explaining that in evaluating the persuasiveness of a particular agency interpretation, “courts have looked to the degree of the agency’s care, its consistency, formality, and relative expertness, and to the persuasiveness of the agency’s position”) (citing *Skidmore*, 323 U.S. at 139-140). For that reason and the others set forth above, Defendants’ deference argument fails as a matter of law.¹²

II. STATISTICAL IMPUTATION CANNOT SUBSTITUTE FOR AN ACTUAL ENUMERATION UNDER THE CONSTITUTION’S CENSUS CLAUSE.

In their opening Memorandum, Plaintiffs identified extensive textual and historical support for their claim that the “actual enumeration” called for by the Constitution cannot be satisfied by statistical estimates such as imputation. Defendants make little or no effort to respond with their own textual or historical evidence of constitutional meaning. Nor could they. The language and history of the Constitution overwhelmingly indicate that the Census Clause

¹² As explained above, the plain language of 13 U.S.C. § 195 unambiguously prohibits the use of statistical imputation in the apportionment count. Nevertheless, even if this Court concludes that the Census Act is sufficiently unclear on this point to warrant consideration of Defendants’ deference argument, it should “construe the statute to avoid” the “serious constitutional problems” raised by Defendants’ interpretation of § 195. *See Edward J. DeBartolo Corp. v. Florida Gulf Coast Building & Constr. Trades Council*, 485 U.S. 568, 575 (1988) (explaining that federal courts should construe statutory text in such a way as to avoid serious constitutional doubts).

limits the apportionment count to data compiled by an actual count and precludes the use of mere estimates.

Ironically, the Bureau itself firmly adhered to this view for many years. In 1980, for example, the Bureau informed Congress and the public that “[t]he term ‘actual Enumeration’” has an established legal, common, and historical definition. *Census Undercount Adjustment: Basis for Decision*, 45 Fed. Reg. 61366, 69,371 (Oct. 20, 1980). According to the Bureau’s previous statements, “actual Enumeration ... means a census or a headcount.” *Id.* “A ‘census’ is an official enumeration of the inhabitants with details of sex, age, family, etc., and the public record thereof; it is not merely a sum total, *but an official list containing the names of all the inhabitants....* A ‘census’ is not an estimate of the population.” *Union Elec. Co. v. Cuivre River Elec. Coop., Inc.*, 871 S.W.2d 790, 794 (Mo. App. 1978) (quoted by the Bureau in *Census Undercount Adjustment*, 45 Fed. Reg. 69,371) (emphasis added and citations omitted).

Accordingly, the Bureau publicly responded to suggestions that it use statistical methods in the apportionment count by pointing out that “the framers of the Constitution drew a clear distinction between an ‘actual Enumeration’ and an estimate, regardless of its underlying methods.” *Census Undercount Adjustment*, 45 Fed. Reg. 69,372. The Bureau therefore firmly rejected “estimates based on *sampling or other statistical procedures, no matter how sophisticated.*” *Id.* Although the Supreme Court has never squarely decided the issue, it is noteworthy that four Justices expressly agreed with this reading of the Census Clause in *House of Representatives*. See 525 U.S. at 344-349.

To be sure, the Bureau later departed from this view of what the Constitution required when it decided for the first time to use the random sampling methodology that was struck down

in *House of Representatives*. Even then, however, the Bureau at least acknowledged that the imputation methodology at issue here was constitutionally indistinguishable from the random sampling methodology at issue there. Indeed, the Bureau told the three-judge District Court in the *House of Representatives* case that “no constitutional difference exists between sampling and the imputation methodology.” Defendants’ Mem. in Opposition to the House’s Motion for Summary Judgment, No. 98-456, at 26-27 n.20 (D.D.C. May 4, 1998) (emphasis in original) (Exhibit A).

Now, however, the Bureau has repudiated that position as well. Joined by North Carolina, the Bureau contends, first, that the Census Clause vests Congress (and therefore, according to Defendants, the Bureau) “virtually unlimited discretion” to decide what the phrase “actual Enumeration” means. DOJ Br. at 53; *see also* N.C. Br. at 47-49. Second, Defendants insist that Plaintiffs (and, by extension, the concurring opinion in *House of Representatives*) have not identified a sufficient “historical or textual basis” for concluding that the Census Clause specifically prohibits the “use of imputation or other statistical method[s]” in the conduct of the decennial census. N.C. Br. at 7. Third, Defendants contend, in essence, that even if the Census Clause means what the *House of Representatives* concurrence says (and what the Bureau previously maintained), the Court should ignore that meaning for various policy reasons. Those reasons include the (false) contention that some use of imputation is inevitable, that it is reliable, and that it is heavily used in other contexts. None of these arguments has merit.

A. The Bureau Does Not Have Discretion to Determine the Meaning of “Actual Enumeration”

In apparent recognition of the weakness of their case on the merits, Defendants strenuously assert that the Bureau has “complete authority” to determine how the census shall be

taken, and that therefore Plaintiffs and this Court must defer to the Bureau's decision to supplement the apportionment count with numbers derived from statistical methods such as imputation. *See, e.g.*, N.C. Br. at 47-48; DOJ Br. at 55. This argument is certainly understandable in light of the Bureau's recent flip-flops as to the meaning of the Census Clause. But it is incorrect.

It is well-established that the courts—not federal agencies—determine the meaning of the Constitution's text. *See, e.g., Miller v. Johnson*, 515 U.S. 900, 922-923 (1995) (stating that a “‘permanent and indispensable feature of our constitutional system’ is that ‘the federal judiciary is supreme in the exposition of the law of the Constitution.’”) (quoting *Cooper v. Aaron*, 358 U.S. 1, 18)); *United States v. Mendoza*, 464 U.S. 154, 161 (1984) (“[T]he Executive Branch must of course defer to the Judicial Branch for final resolution of questions of constitutional law.”); *Marbury v. Madison*, 5 U.S. (1 Cranch) 137, 177 (“It is emphatically the province and duty of the judicial department to say what the law is.”). In keeping with that principle, the Supreme Court has made clear that it will not “‘defer’ to the judgment” of either Congress or an administrative agency “on a constitutional question” and will not “hesitate to invoke the Constitution should we determine that the [agency] has not fulfilled its task.” *Columbia Broadcasting System, Inc. v. Democratic Nat. Committee*, 412 U.S. 94, 103 (1973). Accordingly, the Bureau cannot avoid complying with the constitutional requirement of an “actual Enumeration” simply by pleading for deference to its current interpretation of that phrase. *See, e.g., Sable Commun. of Cal., Inc. v. FCC*, 492 U.S. 115, 129 (1989).

B. Contrary to Defendants' Arguments, The Text and History of the Census Clause Confirm That an “Actual Enumeration” is an Individualized Count, Not a Mere Estimate.

As Plaintiffs explained at length in their opening Memorandum, contemporaneous definitions of the operative term “enumeration” indicate that the Census Clause requires a count that proceeds “singly,” “separately,” “number by number,” or “distinctly.” Mem. at 37-47. Defendants offer no alternative definition of the constitutional language. In fact, the definitions they do cite are precisely in line with those cited by Plaintiffs. DOJ Br. at 53, n. 30. Defendants even go out of their way to cite 18th century definitions of “actual” that indicate that an “actual” enumeration is one “really in act” and “not purely in speculation.” *Id.* Moreover, Plaintiffs have submitted extensive, unrefuted historical evidence that authoritatively demonstrates that (1) the Framers knew the difference between population counts derived from estimates and those based on a person-by-person count using first-hand data; (2) despite the known availability of various estimating procedures, the Framers utterly rejected the idea of apportioning congressional representation based on any form of estimate; and (3) the phrase “actual Enumeration” was understood (in the language of the Framers’ day)¹³ to prescribe an individualized, person-by-person count of the population based on data from those with first-hand knowledge of the matters reported.¹⁴

¹³ Although Defendants dispute Plaintiffs’ interpretation of the requirement of an “actual Enumeration,” they apparently agree that any inquiry into the meaning of this phrase must turn on how the words were understood and used at the time of the Constitution’s founding. See DOJ Br. at 51 (discussing the Framers’ understanding); N.C. Br. at 48-57 (same). This focus on history as an indication of the meaning of constitutional terms has deep historical roots. See, e.g., Thomas Jefferson, Letter to William Johnson (June 12, 1823), in 15 *Writings of Thomas Jefferson* 439, 449 (A. Lipscomb, ed. 1904) (“On every question of construction, [we should] carry ourselves back to the time when the Constitution was adopted; recollect the spirit manifested in the debates; and instead of trying [to find] what meaning may be squeezed out or the text, or invented against it, conform to the probable one in which it was passed.”) (quoted in *McIntyre v. Ohio Elec. Comm’n*, 514 U.S. 334, 371-72 (1995) (Scalia, J. dissenting)).

¹⁴ Defendants attempt to confuse the Court by asserting that Plaintiffs are ambiguous in defining the meaning of “actual Enumeration” and that Plaintiffs’ definition would prevent the Bureau

Despite the extensive textual and historical evidence put forward by Plaintiffs (in addition to that relied upon by the *House of Representatives* concurrence), Defendants nevertheless offer a series of arguments aimed at questioning whether “the phrase ‘actual Enumeration’” is “sufficiently ‘precise’” to be read to proscribe the use of statistical imputation. DOJ Br. at 49. Each of these arguments should be rejected. “‘In expounding the Constitution of the United States, every word must have its due force, and appropriate meaning; for it is evident from the whole instrument, that no word was unnecessarily used, or needlessly added.’” *Richfield Oil*, 329 U.S. at 77-78 (1946) (quoting *Holmes v. Jennison*, 39 U.S. (14 Pet.) 540, 570-71 (1840)). For the reasons set forth below, Defendants’ arguments fail to give “due force” to the plain meaning of the requirement of an “actual Enumeration.”

1. The Framers clearly understood that an estimate is not an actual enumeration.

First, contrary to the conclusion of four Justices in *House of Representatives*, Defendants argue that the Framers could not have meant to draw any substantive distinction between estimates and head counts when they selected the term “actual Enumeration.” *See, e.g.*, N.C. Br. at 56-57. The history cited below and in Plaintiffs’ opening Memorandum, however, thoroughly

from using modern innovations such as the mail-out, mail-back procedure. *See* DOJ Br. at 50-51, n.27. These assertions are specious. As discussed below, the phrase “actual Enumeration” has a historically defined, judicially recognized meaning. In sum, an actual enumeration is an individualized, person-by-person headcount created by gathering information from those with first-hand knowledge, as opposed to any form of estimate—whether that estimate is derived from statistical assumptions or pure guesswork. *See, e.g.*, *House of Representatives*, 525 U.S. at 346-47 (Scalia, J., concurring); Samuel Johnson, *A Dictionary of the English Language* (4th ed. 1773). Thus, the requirement that the Bureau conduct an actual enumeration does not prevent the Bureau from using technologies such as the phone or mail to contact the persons to be enumerated, nor does it prevent the Bureau from gathering information from neighbors or others with first-hand knowledge about the persons to be enumerated.

refutes this assertion. In the language of the founding generation, an actual enumeration and an estimate were different—and mutually exclusive—concepts.

As demonstrated in Plaintiffs' initial Memorandum, early American assessments of the population of the colonies can be divided into two categories: those based on an "enumeration" and those based on a mere "estimate." *See* Mem. at 38. In colonial times, the populations of the various colonies were estimated and enumerated primarily as a result of inquiries from the British Board of Trade, which wished to assess the strength of the colonies for taxation and military purposes. In light of the cost and difficulty of conducting an actual enumeration, "[c]olonial governors looking for data ... often had to resort to estimates in order to satisfy the Board of Trade." James H. Cassedy, *Demography in Early America: Beginnings of the Statistical Mind, 1600-1800*, at 1-2 (1969) (Exhibit B). Contemporaneous accounts of the colonial reports to the Board of Trade drew a clear distinction between such an "estimate" and a census based on an "enumeration." In his 1792 History of New Hampshire, for example, Jeremy Belknap noted the estimates and enumerations in that colony in the 1770s:

The late Governor Wentworth was ordered by the British ministry to take an exact survey; but 'having no fund to pay the expense, and no law to compel obedience' to the order, he was subjected to the inconvenience of delay and disappointment. The number of people however, in 1767, was *estimated* at 52,700. Another *estimate* was made in 1774, of which I have met with no official account; but have been informed that it was 85,000. This was too high. The estimate given to Congress by the delegates of New Hampshire, at the commencement of the revolution, was still more extravagant. A survey taken in 1775, *partly by enumeration and partly by estimation*, for the purpose of establishing an adequate representation of the people, made the whole number 82,200.

Jeremy Belknap, III *The History of New Hampshire* 233-34 (1792) (emphasis added) (Exhibit C). Thus, there can be no doubt that Americans in the colonial era understood the difference between an individualized "enumeration" of the population and a mere "estimate." They

recognized that an enumeration was expensive and inconvenient, and that an estimate could avoid such difficulties. Finally, in direct contravention of Defendants' argument that the Framers had in mind only "gross statistical estimates" and not the more "limited" use of estimates to "supplement" an enumeration, DOJ Br. at 52, Americans in the founding era understood the possibility of an assessment of population "partly by enumeration" and "partly by estimation."

The same distinction was recognized across the Atlantic in 18th-century Britain. Because Britain did not conduct its first census until 1801, there was ample room for debate about the size of the population and whether it was increasing or decreasing. Prior to the adoption of the U.S. Constitution, William Brakenridge, Richard Price, and Richard Forster each offered estimates of Britain's population that suggested that it was declining. These researchers based their estimates on partial enumerations and other methodologies that presaged modern sampling techniques, and they published their work to the scholarly community of the day.¹⁵

¹⁵ See William Brakenridge, *A Letter from the Reverend William Brakenridge, D.D. and F.R.S. to George Lewis Scot, Esq., F.R.S., concerning the Number of Inhabitants within the London Bills of Mortality*, 48 Philosophical Transactions II, No. XCV (1755), at 796 (Exhibit D); William Brakenridge, *A Letter to George Lewis Scot, Esquire, Concerning the Present Increase of the People in Britain and Ireland: From William Brakenridge, D.D. Rector of St. Michael Bassishaw, London, and F.R.S.*, 49 Philosophical Transactions II, No. CXIII (1756), at 877 (Exhibit E); William Brakenridge, *A Letter to the Right Honourable the Earl of Macclesfield, President of the Royal Society, from the Rev. William Brakenridge, D.D. F.R.S. containing an Answer to the Account of the Numbers and Increase of the People of England, by the Rev. Mr. Forster*, 50 Philosophical Transactions I, No. LVIII (1757), at 471 (Exhibit F); Richard Forster, *An Extract of the Register of the Parish of Great Shefford, near Lamborne, in Berkshire, for Ten Years: With Observations on the Same: In a Letter to Tho. Birch, D.D. Secret. R.S. from the Rev. Mr. Richard Forster, Rector of Great Shefford*, 50 Philosophical Transactions I, No. XLIII (1757) at 359 (Exhibit G); Richard Price, *An Essay on the Population of England, From the Revolution to the present Time* (London 1780) (Exhibit H). All of these materials and those cited below are reprinted in D.V. Glass, ed., *The Population Controversy* (1973).

Critics of these assessments consistently drew a stark distinction between an “actual enumeration” of population and a mere “estimate.” Arthur Young, for example, complained that Price’s assessment of “the number of houses” was “not from an *actual enumeration*, (for none was ever yet made) but calculated from the [rolls of the] hearth tax.” Arthur Young, *Reply to Dr. Price. To the Printer of the St. James Chronicle* 324 (North Mims 1772) (emphasis added) (Exhibit I). William Eden similarly couched his skepticism of Price’s writings in terms that drew an explicit contrast between Price’s estimates and an “actual enumeration”:

The most decisive fact would be an *actual enumeration* of the whole people at stated periods; but, as *enumerations* are perhaps impracticable in great states, and in truth have not been attempted with regard to the country and periods now in question, recourse must be had to inductions from the comparison of collateral circumstances at different times.

William Eden, *Letters to the Earl of Carlisle, from William Eden, Esq.* 185 (Greenwich 1780) (emphasis added) (Exhibit I)¹⁶. Prophetically, Eden argued that the various “presumptions to be collected from all the circumstances” was “a subject, with respect to which mankind have differed, and will continue to differ in every period and in every country, where they have no *actual enumerations* to put an end to uncertainty and to force assent.” *Id.* at 187 (emphasis added). Finally, Eden criticized the building blocks of Price’s conclusions, noting that they “were founded on *conjectural estimates*, and not on *actual enumerations*.”¹⁷ *Id.* at xxii (emphasis added).

¹⁶ Due to a clerical error, both Young’s *Reply to Dr. Price* and Eden’s *Letters to the Earl of Carlisle* are reproduced in Exhibit I.

¹⁷ Others of Price’s critics conducted their own localized “enumerations” in an effort to undermine Price’s estimates. One of those was John Howlett, who claimed to have amassed “a sufficient number of *actual enumerations* of the inhabitants of parishes of every description” to call into question Price’s estimates. *Letter from the Rev. John Howlett to the Author, On Population*, in John Middleton, *View of the Agriculture of Middlesex* 565 (London 1798)

Price's critics also discussed the possibility of a "census" or "enumeration" to resolve the controversy. And again, the context of this discussion drew a distinct contrast between a mere estimate (whatever its form) and an actual enumeration. William Wales, for example, agreed that the proposal for a "public census ... would certainly be very agreeable to every speculative mind," but expressed concern that such an "enumeration" might give comfort to England's enemies who "have always been used to *estimate* us at seven or eight millions":

If ... such an *enumeration* should take place, and we should be found short of the number which they have been used to take us at, they might probably, instead of reflecting that they have a stronger adversary to contend with than formerly, only consider that we are weaker than they had imagined, and take fresh courage from that consideration, and especially, as such an *enumeration* would determine nothing with respect to our number at any former time.

William Wales, *An Inquiry into the Present State of Population in England and Wales* 77

(London 1781) (emphasis added) (Exhibit K).¹⁸ Thus, Wales drew an express contrast between the "estimates" of population that had been offered and the "enumeration" of precise numbers that would be created by a census. In fact, Wales gave a further indication of this understanding

(emphasis added) (Exhibit J). In so doing, Howlett expressly contrasted such actual enumerations with the "estimates" Price and others had offered, and specifically noted the "infinitely greater, but necessary trouble" of the former as compared to the latter. *Id.* at 563-64.

Price himself also acknowledged the distinction between an estimate and an enumeration. In a subsequent response to Eden and others, Price acknowledged that the reliability of his statistical assumptions (which, like the Bureau's imputation, assigned a population to households that were reasonably believed to exist) could be best determined by taking "careful enumerations" of the number of houses "in a great variety of parishes and towns in different parts of the kingdom." Richard Price, *Observations* 304 (5th ed. 1792) (Exhibit R). But Price was "not possessed of many such accounts," although he acknowledged that some of his critics had "collected several accounts of *enumerations* of houses" in an effort to support their view. *Id.* at 316.

¹⁸ Wales used the phrase "actual enumeration" elsewhere in this same publication in obvious reference to physical counts that had been conducted on a localized basis. *See id.* at 67 (listing a "few following comparisons of actual enumerations" from ten different towns at two different

of an enumeration in prescribing the method that he would favor “if such a proceeding should be thought advisable”:

I am clearly of opinion the most eligible persons to perform it are the parochial clergy; and, by them, it would be performed in a very few weeks. I have heard the opinions of the ministers of some of the most extensive parishes in England, who think it might be done, even in their parishes, with ease and certainty, in two months; with the addition of age, situation and profession of each individual.

Id. at 78. Again, Wales obviously shared his contemporaries’ understanding that an enumeration would require an actual, individualized count, and not an estimate. To him, an enumeration was not an estimate derived from valid or invalid assumptions; it was something that would proceed within local parishes and be focused on “each individual.”

Toward the close of the 18th century (and near the time of the American Constitutional Convention), British decision makers began to accept the idea of actually enumerating the population. In 1796, John Rickman, who would eventually be appointed to supervise the first British census, published an influential memorandum advocating a “general enumeration of the people of the British empire.”¹⁹ Rickman’s memorandum acknowledged many of the concerns that continue to dominate today’s census debates, and it did so again using the term “enumeration” advisedly. After arguing at some length in favor of the “utility of the knowledge of British population,” Rickman described his understanding of the history and nature of an

time periods as being “all that have come to [his] knowledge”); *id.* at 69 (referring to the “actual enumerations” of the “number of inhabitants in ten cities, towns, and villages”).

¹⁹ See D.V. Glass, *Numbering the people: The Eighteenth-century population controversy and the development of census and vital statistics in Britain* 90, 96, 106 (1973) (Exhibit O) (attaching an “annotated version of the memorandum,” which was originally published as John Rickman, *The Commercial and Agricultural Magazine* 391 (June 1800)). That version of Rickman’s memorandum is cited below and attached as Exhibit L).

actual enumeration.²⁰ Rickman described, for example, the “Census of Roman Citizens,” which was conducted “by collecting them in their respective municipal, and firmly *enumerating* all who made their appearance,”²¹ as well as an enumeration in England in the “24th year of Elizabeth (in fear of Spanish invasion) ... of all men able to bear arms.”²² But although Rickman generally advocated in favor of a census, he also acknowledged that a complete enumeration would be costly and in any event would result in an undercount—“as actual enumeration must always be under the real number.”²³

Finally, in 1800 a “Population Bill” was introduced in Parliament, calling for a full enumeration of the British population. 41 Geo. III c. 15, 126-131 (Exhibit M). Both the parliamentary history and the text of the 1800 Act carry forward the established usage of the term “enumeration.” In a speech in the House of Commons, Charles Abbot complained of the inadequacy of the existing “inquiries and estimates” of population, which—although they had been compiled by the experts of the day—rested on partial “numerations of the people,” or “imperfect data.” XXXV *The Parliamentary History of England, from the Earliest Period to the Year 1803* 599-600 (London, T.C. Hansard 1819) (Exhibit N). In order to “substitute certainty for conjecture,” the bill called for a complete enumeration of the “total Number of Persons within the Kingdom of Great Britain.” 41 Geo. III c. 15, 560-68. Specifically, the bill required “overseers” of the census to “take an Account in Writing of the Number of Persons at that Time being within the Limits of such Parishes, Townships, and Places, ... by proceeding together or separately from House to House, or otherwise, as they shall judge expedient for the better

²⁰ Rickman, *The Commercial and Agricultural Magazine* at 396.

²¹ *Id.* (emphasis added).

²² *Id.* at 397.

Execution of this Act.” *Id.* This bill was enacted into law and Britain’s first national census was taken on March 10, 1801. *See* Glass, *Numbering the People*, at 91.

All of this historical evidence confirms the conclusion of the *House of Representatives* concurrence that the generation of the Framers understood well the difference between an “actual enumeration” and a mere “estimate.” The phrase that is at the center of the constitutional debate—an “actual enumeration”—was a term of art used to draw the very distinction at issue in this case.

2. The Framers expressly rejected the idea of an apportionment based on any kind of estimate, even though they recognized that an “actual enumeration” would inevitably result in an undercount of the population.

Next, contrary to the *House of Representatives* concurrence, Defendants argue that the idea of apportioning congressional representation based on a population estimate did not even enter the Framers’ minds, and therefore they could not have made a conscious choice to exclude estimates from the census. *See, e.g.*, N.C. Br. at 56-57 & n.20. Again, Defendants offer no historical basis for this speculation, and the very history that Defendants discuss in their briefs actively refutes it. As Defendants recognize, the Framers actually *debated* apportioning congressional representation based on an estimate of the states’ respective wealth, and even after they selected the terminology of an “actual Enumeration,” the Framers based the first apportionment of Representatives on a rough estimate of the population, since there was no time to conduct a census before the first Congress convened. *See* N.C. Br. at 56-57 & n.20 (citing 1 Farrand, at 561, 582-83); *see also* U.S. Const. art. I, § 2, cl. 3 (apportioning a certain number of Representatives until the first “enumeration shall be made”).

²³ *Id.*

The history of the first Census Act (which was apparently not available to the Court in *House of Representatives*) confirms Plaintiffs' point. In their correspondence discussing the returns from the first census, George Washington and Thomas Jefferson lamented the fact that the returns from the "enumeration" had fallen short of their "estimates" of the population and failed to accurately reflect the true population. In a letter from Thomas Jefferson to William Short, for example, Jefferson wrote as follows:

I enclose you also a copy of our census, written in black ink, so far as we have actual returns, and supplied by conjecture in red ink, where we have no returns; but the conjectures are known to be very near the truth. Making very small allowance for omissions, which we know to have been very great, we are certainly above four millions, probably about four millions one hundred thousand.²⁴

Washington expressed a similar sentiment in a letter to Gouverneur Morris dated July 28, 1791.

Washington's comments were in a paragraph lamenting that the "enumeration" of the population would fall short of the "estimate" he had previously offered of the population of the United States:

In one of my letters to you the account which I gave of the number of inhabitants which would probably be found in the United States on enumeration was too large. The estimate was then founded on the ideas held out by the Gentlemen in Congress of the population of their several States, each of whom (as was very natural) looking thro' a magnifying glass would speak of the greatest extent, to which there was any probability of their numbers reaching. Returns of the Census have already been made from several of the States and a tolerably just estimate has been formed now in others, by which it

²⁴ VIII *The Writings of Thomas Jefferson*, Andrew A. Lipscomb, ed., 236 (1903) (Exhibit P). See also *id.* at 229 (setting forth Jefferson's letter to William Carmichael, which states that Jefferson is enclosing "a copy of our census" and offers the same explanation that the "actual returns" are "written in black ink" and that "what is in red ink is being conjectured," and asserts that "we may safely say we are above four millions" by "[m]aking very small allowance for omissions, which we know to have been very great").

appears that we shall hardly reach four millions; but one thing is certain our *real* numbers will exceed, greatly, the official returns of them.²⁵

This correspondence confirms, not only that Washington and Jefferson understood the distinction between an enumeration and an estimate, but also that they understood the Constitution and the first Census Act to have chosen the former over the latter. Washington contrasted the “official returns” of the “enumeration” with his own “estimate” of the population, and with the “tolerably just estimate” arrived at in States that had not yet reported their returns. By the same token, Jefferson highlighted the same distinction in his two colors of ink, noting the “actual returns” of the enumeration in “black ink” and “conjectures ... known to be very near the truth” in “red ink.”

Moreover, despite their self-proclaimed ability to provide estimates where actual enumerations were lacking, Washington and Jefferson accepted the fact that the actual enumeration had failed to provide a full account of the population and were resigned to the

²⁵ 31 *The Writings of George Washington*, John C. Fitzpatrick, ed. 329 (1931) (Exhibit Q). After indicating that the “official returns” of the “enumeration” would fall short of both his earlier “estimate” and of the “real numbers” of persons in the population, Washington also offered his understanding of the reasons for the shortfall:

[T]he religious scruples of some, would not allow them to give in their lists; the fears of others that it was intended as the foundation of a tax induced them to conceal or diminished theirs, and thro’ the indolence of the people, and the negligence of many of the Officers numbers are omitted.

Id. Despite the shortfall that flowed from the negligence of some of the enumerators and the indolence, fears, and religious scruples of the people, Washington concluded by expressing confidence that the “authenticated number” produced by the official returns of the enumeration would be “far greater ... than has ever been allowed in Europe,” and that the returns (such as

impropriety of supplementing the official returns by methods of estimation. Washington, for example, was as convinced as he was disappointed that the new nation's "real numbers [would] exceed, greatly, the official returns of them." But although he had a practical capacity and an obvious incentive to augment the official returns with supplemental estimates (in order to better "influence" Europe to "form a more just opinion of our present and growing importance"), Washington acknowledged that he was bound by the "authenticated number" produced by the official returns of the enumeration. Similarly, Jefferson acknowledged that the "omissions" in the enumeration had "been very great," so much so that the true population was "certainly above four millions, probably about four millions one hundred thousand." *The Writings of Thomas Jefferson*, 236. And although Jefferson acknowledged a practical capacity to make an "allowance" for the "omissions" in order to arrive at a more accurate measure of the population, like Washington he understood that the Constitution called for census "returns" based on an actual enumeration, not mere "conjecture." *Id.*

Accordingly, there can be no doubt that the Framers knew what an estimate of population was, that they referred to an estimate as just that and not as an "actual Enumeration," that they had the option to apportion Representatives on the basis of a full or partial estimate of the population, and that they decided instead to require an "actual Enumeration" of the people.

3. The Framers selected an "enumeration" over an "estimate" so as to minimize the risk of any kind of political manipulation.

As explained in Plaintiff's opening brief, the Framers' decision to require an "actual enumeration" rather than an "estimate" was based, not on any misconception about the accuracy

they were) would "have no small influence in enabling them to form a more just opinion of our present and growing importance than has yet been entertained there." *Id.*

of the former over the latter, but on political considerations. Specifically, as Justice Scalia noted in *House of Representatives*, the Framers wanted to minimize the risk of “partisan manipulation” by the federal government, and they recognized that an actual enumeration would be less subject to manipulation than an estimate. 525 U.S. at 349.

Disagreeing with Justice Scalia, the Bureau contends that the Framers’ real concern was directed, not to manipulation by the federal government, but to manipulation “by the individual states.” DOJ Br. at 55. In fact, the evidence cited by both Plaintiffs and Defendants suggests that the Framers were likely concerned about *any* kind of political manipulation. And, as Plaintiffs have explained, the imputation scheme used in the 2000 Census (and their reliance on the Bureau’s “master address file” procedures, *see* Plaintiffs’ Mem. in Support of Sum. J. at 19-20, ¶¶ 39-43) presents ample opportunities for enterprising States to inflate the apportionment count. However, it is important to note that—contrary to Defendants’ suggestions—no showing of actual political manipulation is required to enforce the Constitution’s demand for an “actual Enumeration.” The Framers did not provide that an actual enumeration would be conducted upon a showing of partisan manipulation, but rather minimized the chance of any such manipulation by requiring an individualized count for every census following the initial allocation of Representatives.

C. The Bureau’s Policy Concerns Provide No Basis For Ignoring The Constitutional Requirement.

Perhaps recognizing the weakness of their position on the merits, Defendants advance what appear to be nothing more than policy arguments for ignoring the text and history of the Census Clause. Those arguments are not only inapposite, they are also misguided, even on their own terms.

1. Estimation is not inevitable.

Defendants first resort to the puzzling argument that some estimation is inevitable in a census, and for that reason estimation must be constitutional. *See* DOJ Br. at 53. The inevitability argument is based on the notion that a decision “[n]ot to impute a plausible value is to impute *zero* occupants for [unenumerated] households, which is the equivalent of *not* counting the individuals in those households.” *Id.* This argument fails both as a matter of logic and as a matter of history.

First, Defendants’ argument depends on a fundamental logical flaw: that the Constitution is equally offended by the *exclusion* of those who cannot be enumerated as it is by the *inclusion* of those same persons by methods of statistical estimation. That notion cannot be reconciled with the plain language of the Census Clause. That clause requires that apportionment be based on an actual enumeration—on the numbers of persons that are individually accounted for by those who have personal knowledge of their existence. In so doing, the Census Clause necessarily assumes that all persons who cannot be enumerated will be *excluded* from the apportionment. *Exclusion* of those persons accordingly does not imply that they are “imputed” out of existence; it simply means that, for whatever reason, they could not be “enumerated” and therefore included in the apportionment count, just as many citizens could not be included in the first census. *Inclusion* of those same persons, on the other hand, would run afoul of the express constitutional command and cannot be deemed to be equivalent.²⁶

²⁶ Moreover, Defendants’ argument would apply with equal force to the “gross statistical estimates” that they admit were called into constitutional doubt in *House of Representatives*. DOJ Br. at 52. The Bureau proposed to conduct those estimates to correct for what it perceived as an inevitable undercount of population in some areas and among some groups. *See House of Representatives*, 525 U.S. at 320. Under the Defendants’ argument, failing to estimate those

Second, Defendants again fail to offer any textual or historical support for their position, and again the historical record thoroughly undermines it. As noted in detail above, the Framers consistently acknowledged that an enumeration would not count everyone. And although Washington and Jefferson lamented the fact that the first census failed to portray a true picture of the full population, and were obviously aware that unenumerated households could be estimated, they understood that the apportionment count under the Constitution was limited to the official returns of the actual enumeration.

Thus, the Framers understood the inevitable fact that not all households can be enumerated, but they never adopted the Defendants' notion that such inevitability permits the use of an estimate. And, unlike Defendants, they never understood the mere failure to find someone as logically equivalent to an "estimate" that the person doesn't exist.

2. The constitutionality of a method of estimation cannot turn on its relative reliability.

Defendants next argue that the constitutional requirement of an actual enumeration cannot apply to modern estimates because these estimates are arguably more reliable than those that were used in the Framers' time. DOJ Br. at 52-53; N.C. Br. at 57-59. As North Carolina puts it, "[n]o one contends that the Framers intended or that the Constitution permits an unscientific approximation of the country's population ... [but t]he scientific validity of [modern] statistical analysis cannot be derogated by dismissing it as mere unscientific estimation." N.C. Br. at 57. *See also* DOJ Br. at 52 (stating that "the type of 'estimation' about which the Framers were concerned was that based on conjecture, projections, political deal-

people is the same as estimating their number as zero—and therefore any census result is unconstitutional if the Census Clause prohibits estimation.

making or pure guesswork, not the limited use of a procedure designed to deal with inevitable errors or missing data during a census that *is* attempting to count every inhabitant.”).

This astonishing argument must be rejected because it flies in the face of settled principles of constitutional interpretation. Because Defendants have no historical or textual support for the claim that the Framers intended to exclude the best estimates of their day—but not the best estimates of some future day—they argue that the text of the Constitution has become outdated and that the Framers’ plain words should be ignored in light of modern advancements. *See* N.C. Br. at 58 (“since the science of statistics was only nascent in the Eighteenth Century ... it is improbable that the Framers considered the use of statistical methods for taking the census.”) The Supreme Court has repeatedly rejected this argument. *See, e.g., Tashjian v. Republican Party of Conn.*, 479 U.S. 208, 226 (1986) (holding that the Qualifications Clause of Article I, § 2 applies to primary elections notwithstanding the fact that the Framers did not “contemplate[] the effects of that provision upon the modern system of party primaries”); *United States v. Classic*, 313 U.S. 299, 315-316 (1941) (“[I]n determining whether a provision of the Constitution applies to a new subject matter, it is of little significance that it is one with which the framers were not familiar. For in setting up an enduring framework of government they undertook to carry out for the indefinite future and in all the vicissitudes of the changing affairs of men, those fundamental purposes which the instrument itself discloses.”).

Moreover, if Defendants’ argument were accepted, it would embroil the federal courts in an endless series of subjective inquiries into which estimation procedures are of comparable reliability to those of the Framers’ day, and which methods are sufficiently accurate to pass constitutional muster. Defendants argue that the federal courts are suited to such a task, *see* N.C.

Br. at 57 n.21, but it is clear that this would be an unworkable (not to mention constitutionally unintended) exercise.

This case is a perfect example. Statistical texts and the expert affiants disagree about the statistical validity of the Bureau's assumption that each household is demographically identical to its neighbors. *See, e.g.,* Morris H. Hansen, William N. Hurwitz and William G. Madow, *Sample Survey Methods and Theory*, Vol. I at 80-81 (1953). The Court, however, has no workable standard for determining which experts are right about the effects of imputation and whether those effects meet some undefined minimum level of reliability. This cannot be what the Framers of the Census Clause intended. *See House of Representatives*, 525 U.S. at 348-49 (Scalia, J. concurring) ("The prospect of this Court's reviewing estimation techniques in the future, to determine which of them so obviously creates a distortion that it cannot be allowed, is not a happy one.").

3. The constitutionality of a method of estimation cannot turn on the extent of its use.

Finally, Defendants argue that imputation is distinguishable from a prohibited "unscientific approximation" because the Bureau uses imputation to estimate only a portion of the population and not to provide a "gross statistical estimate". *See, e.g.,* DOJ Br. at 52 (describing imputation as a "limited procedure"). Under this argument, an estimation procedure is apparently unconstitutional if it supplies all or even a large part of the data used in the apportionment count, but it is constitutionally permissible if only a few estimated "persons" are added to what otherwise was an actual enumeration.

This distinction also lacks support in the text and history of the Census Clause. Defendants identify no constitutional language or contemporaneous debate that indicates that an

“actual Enumeration” may be supplemented by estimation at the margins. And again, Plaintiffs have identified historical evidence to the contrary – including extensive evidence that was not before the Supreme Court when *House of Representatives* was decided. The above discussion of assessments of population in the colonial era reveals that the Framers’ generation understood the possibility of an assessment derived “partly by enumeration and partly by estimation.” With this historical backdrop, the constitutional requirement of an “actual Enumeration” must be understood to reject *all* estimates, not just those that operate on a “gross” or “aggregate” basis to replace an enumeration.

Moreover, as noted above, the Framers’ contemporaries recognized that because of the difficulties associated with conducting a person-by-person count, “an actual enumeration must always be under the real number.” Rickman, *The Commercial and Agricultural Magazine* at 396. Accordingly, when the Framers used the phrase “actual Enumeration,” they understood that some segment of the population would be missed, yet they did not allow for estimation at the margins to correct for this inevitable undercount.

Finally, the standard proposed by Defendants again is judicially unworkable. Defendants provide the court with no standard for determining when a “limited [estimating] procedure” crosses the constitutional line to become a prohibited “gross statistical estimate[.]” DOJ Br. at 52 (quoting *House of Representatives*, 525 U.S. at 347 (Scalia, J., concurring)). Defendants also fail to recognize that there is little practical difference between estimating most or all of the population and estimating at the margins. As this case amply demonstrates, distinctions at the

margins of the apportionment count can have a determinative impact on the allocation of Representatives among the states.²⁷

For all these reasons, this Court should reject the Bureau's reading of the Census Clause. If the Court finds it necessary to reach the constitutional issue in this case, the Court should adopt instead the interpretation that the Bureau itself articulated in 1980, and which was adopted by the four concurring Justices in *House of Representatives*.

III. STATISTICAL IMPUTATION VIOLATES THE ADMINISTRATIVE PROCEDURE ACT.

Plaintiffs are also entitled to summary judgment on their claim that imputation violates the Administrative Procedure Act. In their opening brief (at 48-49), Plaintiffs demonstrated that the Bureau's use of imputation in the 2000 census is arbitrary and capricious for two separate reasons. First, as far as the administrative record shows, the Bureau has not even attempted, at the administrative level (as opposed to litigation), to explain whether it believes imputation "furthers the constitutional goal of equal representation" and, if so, how it furthers that goal. Utah Br. at 48. Second, the Bureau has never examined whether imputation is consistent with the Census Act or the Census Clause, much less explained how that procedure can be reconciled with the majority and concurring opinions in *House of Representatives*. See, e.g., *Motor Vehicle Manufacturers Ass'n v. State Farm Mutual Automobile Ins. Co.*, 463 U.S. 29, 43 (1983) (stating that an agency's decision should be reversed under the APA if the agency fails to consider an important aspect of the problem before it); *Clark-Cowlitz Joint Operating Agency v. FERC*, 826

²⁷ Indeed, later in their briefs, Defendants ultimately recognize that this language governs the census, that the term "actual Enumeration" must have some independent meaning, and that (contrary to some of their other assertions) Congress' power to direct the census is therefore not unlimited. See, e.g., DOJ Br. at 53 & n.30; N.C. Br. at 47-50.

F.2d 1074, 1091 (D.C. Cir. 1987) (same); *Greater Boston Television Corp. v. FCC*, 444 F.2d 841, 851 (D.C. Cir. 1971) (stating that an agency must “articulate with reasonable clarity its reasons for decision, and identify the significance of the crucial facts”).

As explained below, the Bureau’s submission (particularly the affidavit of Dr. Hogan) essentially concedes this second point, and provides so little by way of response to the first point that the Bureau must be deemed to have failed to respond to the merits of that claim. In light of the standards provided by the Constitution and the Census Act, the Bureau is also incorrect in claiming that its decision to use imputation is unreviewable for lack of judicially reviewable standards. Nor is there any merit to Defendants’ procedural objections to Plaintiffs’ APA claims, specifically, their arguments that the Bureau’s decision to use imputation is not “final agency action” and their contention that the Court is powerless to grant meaningful relief.

A. The Bureau has failed to contradict the merits of Plaintiffs’ APA claims.

Defendants’ response to Plaintiffs’ second APA argument effectively concedes Plaintiffs’ point. The Bureau fails to identify any record evidence showing that it carefully considered whether imputation is consistent with the governing constitutional and statutory standards. In fact, the Bureau’s expert expressly admits that the Bureau did not conduct any comprehensive review of its imputation procedures after the 1990 census. *See Hogan Aff.* ¶ 57.

This omission would have been arbitrary even if the Supreme Court had not given the Bureau new guidance in *House of Representatives*. However, in light of that opinion, it is difficult to imagine how an agency could rationally conclude that no comprehensive review of imputation was necessary when: (1) the Supreme Court concluded that the Bureau’s plan to use sampling is the apportionment count was unlawful; (2) four Justices of the Supreme Court

clarified that sampling also violates the Census Clause; and (3) the Bureau affirmatively represented to the Court that there is no constitutional difference between sampling and imputation. *See* Defendants' Mem. in Opposition to the House's Motion for Summary Judgment, No. 98-456, at 26-27 n.20 (D.D.C. May 4, 1998) ("*no constitutional* difference exists between sampling and the imputation methodology") (emphasis in original).

Simply stated, the Bureau failed to consider the *most* important aspect of the 2000 census—whether its procedures comply with the applicable constitutional and statutory standards. *See, e.g., Motor Vehicle Manufacturers Ass'n.*, 463 U.S. at 43.

Similarly, Defendants fail to adequately respond to Plaintiffs' first APA claim, which points out that the Bureau has neglected to provide sufficient evidence and explanation of how imputation furthers the constitutional goal of equal representation (otherwise known as "distributive accuracy"). Defendants argue that imputation furthers some generalized notion of "accuracy" because it "actually counts" additional "inhabitants." *See* DOJ Br. at 53; N.C. Br. at 57. However, even if that were true, the Bureau admits that it does not know whether imputation has a positive or negative effect on distributive accuracy, which is the only accuracy that counts for purposes of apportionment. *See* DOJ Br. at 15, ¶ 35 ("[T]he Census Bureau focused on achieving numeric accuracy because it is difficult to predict in advance the effect of census operations on distributive accuracy.... Imputation furthers numeric accuracy."). As both the Supreme Court and Defendants have recognized, the entire constitutional purpose of the census is to distribute congressional representation among the states on a proportional basis. *See, e.g., Wisconsin v. City of New York*, 517 U.S. 1, 20-21 (1996); *Franklin v. Massachusetts*, 505 U.S. 788, 804 (1992). Thus, it is inadequate to say (as Defendants do) that imputation is justified

simply because it supposedly counts more people—the important thing is whether the citizens of each state are counted *proportionally*. See, e.g., *Wisconsin*, 517 U.S. at 20-21. Because Defendants effectively admit they have failed to adduce evidence and reasoning sufficient to show that imputation furthers this requirement, the Bureau’s decision to use imputation in the apportionment count must be reversed.

B. The Bureau’s decision to supplement the actual enumeration with statistical estimates is judicially reviewable

Having failed to meaningfully respond to the merits of Plaintiffs’ APA claim, Defendants resort to the incredible argument that the Bureau has complete, unreviewable discretion to use statistical estimates in place of an individualized count. DOJ Br. at 59-60. In spite of the Supreme Court’s interpretation of Section 195 and the Census Clause in *House of Representatives*, Defendants argue that there is no “meaningful standard” against which the Bureau’s actions may be judged.

Defendants are incorrect. First, as the Supreme Court and the Tenth Circuit have repeatedly declared, “the APA establishes a *strong presumption in favor of reviewability of agency action*.” *McAlpine*, 112 F.3d at 1432 (emphasis in original). Defendants would turn that presumption on its head and give the Bureau license to act with abandon in carrying out a constitutional and statutory duty.

Both the Constitution and the Census Act, moreover, provide judicially administrable standards. In fact, the Supreme Court has entertained, on the merits, numerous constitutional and statutory challenges to the Bureau’s policies and procedures, including the policy at issue in *House of Representatives*. See, e.g., *House of Representatives*, 525 U.S. 316; *Wisconsin*, 517 U.S. 1; *Franklin*, 505 U.S. 788. If the Bureau’s “committed to agency discretion” argument

were correct, the Supreme Court would have had to dismiss the challenges in those cases rather than entertain them on the merits.

Indeed, Defendants' argument conflicts with the Bureau's pre-litigation admission that the Constitution and laws do not grant the Bureau limitless discretion. *See, e.g.*, 45 Fed. Reg. No. 204 at 69371-72 (stating that the Bureau cannot incorporate in the apportionment count "estimates based on *sampling or other statistical procedures, no matter how sophisticated*") (emphasis added). This admission not only establishes the Court's authority to review the Bureau's compliance with the limitations of federal law; it also demonstrates the arbitrariness of the Bureau's decisionmaking.²⁸

Given that both the Constitution and the Census Act provide administrable standards under which to judge the Bureau's decisions on their merits, the APA's "arbitrary and capricious" standard gives the Court ample basis for determining whether the agency has acted arbitrarily in light of those standards. As noted earlier, the essence of Plaintiffs' APA claims is that the agency has failed to give any express consideration to the question of how those standards apply to its practice of imputation, and has thereby "failed to consider an important aspect of the problem [before it]," *State Farm*, 463 U.S. at 43, and failed to "articulate with

²⁸ It is a fundamental principle of administrative law that an agency violates the APA if it suddenly reverses course without an adequate explanation for the change. *See, e.g., Grace Petroleum Corp. v. FERC*, 815 F.2d 589, 591 (10th Cir. 1987) ("[A]n agency changing its course must supply a reasoned analysis indicating that prior policies and standards are being deliberately changed, not casually ignored, and if an agency glosses over or swerves from prior precedents without discussion it may cross the line from tolerably terse to the intolerably mute.") (quoting *Greater Boston*, 444 F.2d at 852; *Squaw Transit Co. v. United States*, 574 F.2d 492, 496 (10th Cir. 1978) ("[W]e surely must require the agency to adhere to its own pronouncements, or explain its departure from them.")). In this case, the Bureau has offered no reasoned explanation for abandoning its previous interpretation of the Census Clause and Section 195, and it has violated the APA for this reason alone.

reasonable clarity its reasons for [its] decision[s].” *Greater Boston*, 444 F.2d at 851.

Determining whether the Bureau has failed to fulfill those basic obligations is well within this Court’s authority and ability.

C. The Bureau’s decision to use imputation in the apportionment count is final agency action, and is not immune from review simply because Plaintiffs lacked standing to challenge it until the results of the census were known.

Defendants’ procedural challenges are also without merit. First, Defendants are incorrect in contending that, under *Franklin v. Massachusetts*, 505 U.S. 788, and *State of Utah v. Evans*, No. 2:01CV002B, slip op at 10 (D. Utah April 17, 2001), the Bureau’s decision to use imputation in the 2000 census is immune from review under the APA because the decision did not constitute “final agency action.” DOJ Br. at 58-59. This argument is foreclosed by statute. In 1997, Congress enacted Public Law 105-119, which declares that “the use of statistical sampling or statistical adjustment in conjunction with an actual enumeration to carry out the census ... poses the risk of an inaccurate, invalid, and unconstitutional census.” Pub. L. 105-119, Title II, § 209(a)(7), 111 Stat. 2480 (reproduced in the note to 13 U.S.C. §141). Accordingly, Congress provided that “[a]ny person aggrieved by the use of any statistical method . . . in connection with the 2000 or any later decennial census . . . may in a civil action obtain declaratory, injunctive, and any other appropriate relief against the use of such method.” *Id.* § 209(b). Anticipating the very argument that Defendants press here, moreover, Congress provided that the Bureau’s pre-census report and Operational Plan “shall be deemed to constitute final agency action regarding the use of statistical methods in the 2000 decennial census.” *Id.* § 209(c)(1).

Defendants do not contest that imputation is—at a minimum—a “statistical adjustment in connection with an actual enumeration.” *See, e.g.*, N.C. Br. at 2, 3 (referring to imputation as a “statistical method”). Nor do Defendants contest that the Bureau’s pre-census report and Operational Plan expressed the Bureau’s decision to use imputation in the apportionment count. Accordingly, the Bureau’s decision to supplement census with data derived from imputation is unquestionably final agency action subject to APA review.²⁹

Finally, Defendants are also incorrect in suggesting that, because the census has been completed, the Court is powerless to remedy any violation of the APA. *See id.* Defendants cite no authority for the novel position that an agency’s arbitrary rule cannot be reversed once it has been implemented. Moreover, Defendants’ argument leads to a nonsensical result. Public Law 105-119 clearly expresses Congress’ intent to subject the Bureau’s use of statistical methods to judicial review, but the Bureau now effectively asserts that the states may never bring suit under that law since (1) no plaintiff has standing to bring an APA claim until they have suffered a concrete injury, *see, e.g.*, *Western Soshone Business Council v. Babbitt*, 1 F.3d 1052, 1055 (10th Cir. 1993); and (2) a state will never be able to establish that it has suffered such an injury in a particular census until the Bureau reports the result of the apportionment count.

Defendants unwittingly provide the simple and correct answer to their argument. This Court can and should rectify the Bureau’s arbitrary behavior by vacating the Bureau’s decision to

²⁹ Defendants’ only response to this clear statutory mandate is to suggest that Plaintiffs somehow waived the right to rely on Public Law 105-119 by failing to anticipate and rebut Defendants’ baseless argument in their opening brief. *See* DOJ Br. at 59 n.35 (conceding that Plaintiffs’ complaint specifically alleges final agency action under Section 209 of Pub. L. 105-119). This assertion is nonsensical. A party moving for summary judgment is not “expected to anticipate (and therefore provide a reply and documentation for) every argument or factual assertion made

use imputation in the apportionment count and remanding to the Bureau “for consideration consistent with the ... [C]ourt’s decision.” DOJ Br. at 64. The Bureau may then engage in reasoned decisionmaking regarding whether the use of imputation (in this and future censuses) is consistent with its constitutional and statutory mandate and may explain its abrupt departure from its previous position on this issue. While that reasoned, orderly process of decisionmaking must ultimately lead to one conclusion (that the use of imputation is improper), this Court need not—for purposes of Plaintiffs’ APA claim—compel the Bureau to reach that result.

IV. PLAINTIFFS’ CLAIMS CANNOT BE BARRED BY LACHES

North Carolina also attempts to avoid the merits of Plaintiffs’ claims under the guise of the defense of laches. Despite the fact that Plaintiffs filed their claims challenging statistical imputation literally days after they first determined that they had standing to do so, and notwithstanding the fact that North Carolina initially responded to Plaintiffs’ claims by opposing the expedited scheduling order proposed by Plaintiffs, North Carolina nevertheless argues that this Court should not reach the merits of the case because the timing of its resolution may make it difficult for candidates to plan for the 2002 congressional race.

North Carolina’s attempt to avoid the merits under the doctrine of laches fails as a matter of law. It is well settled that laches is inapplicable in suits like this one that are aimed at protecting the public interest. Moreover, even if laches were applicable, North Carolina could not carry its burden of establishing unreasonable delay by Plaintiffs or cognizable prejudice to North Carolina.

A. Laches Is No Defense In A Suit To Protect The Public Interest.

by the respondent in the respondent’s brief in opposition to the motion.” *Johnson v. Academy*

“[L]aches is no defense in a suit to . . . protect the public interest.” *Natural Resources Defense Council v. Fox*, 909 F.Supp. 153, 160 (S.D.N.Y. 1995)(quoting *United States v. Summerlin*, 310 U.S. 414 (1940)). See also *Lake Michigan Federation v. Army Corps of Engineers*, 742 F.Supp. 441 (N.D. Ill. 1990). In *Fox*, a citizen group sued to enforce an EPA administrator’s performance of a non-discretionary duty. The court held that laches could not bar a citizen’s suit to enforce an administrator to act. *Fox*, 909 F.Supp. at 160.

Generally, the courts cite two reasons for denying a defense of laches in matters of public interest: “the magnitude and importance of the rights at stake when the interests of the public are asserted; and . . . the determination that those rights cannot be compromised or forfeited by the negligent . . . acts of . . . guardians of the public.” *Student Public Interest Research Group of N.J. v. P.D. Oil & Storage*, 627 F.Supp. 1074, 1085 (D. N.J. 1986) (quoting *United States v. California*, 332 U.S. 19 (1947)). In short, the Supreme Court has made clear that government holds its interests in trust for all the people, and it is not to be deprived of those interests by ordinary court rules designed for private disputes. *California*, 332 U.S. at 40.

There is no question that the proper apportionment of Congressional seats is of vital interest to the entire populace of the United States. Fair and equal representation in government is one of the most fundamental rights a United States citizen possesses. See *House of Representatives*, 525 U.S. at 331-32. A right of this magnitude simply cannot be denied a hearing on the merits.

B. North Carolina Cannot Show Unreasonable Delay Or Resulting Prejudice.

Tours and Travel Center, Inc., 862 F.Supp. 1287, 1289 (M.D. Pa. 1994).

In all events, to invoke the defense of laches, a defendant must prove two elements: “(1) inexcusable delay ... and (2) resulting prejudice to [the] defendant from such delay.” *In re Centric Corp.*, 901 F.2d 1514, 1519 (10th Cir. 1990). North Carolina’s laches theory fails on both elements.

1. Plaintiffs filed this action within days of discovering their claim.

North Carolina does not and cannot dispute the fact that Plaintiffs initially filed their imputation claims on April 13, just four days after they were first able to determine that the use of imputation deprived the State of Utah of its fourth seat in the House of Representatives. *See* Pl’s Mem. in Support of Mo. to File Third Am. Compl. (Exhibit S) at 2. Prior to April 9, Plaintiffs had no knowledge of whether they had standing to assert any claims because the Census Bureau had failed to comply with its statutory duty of releasing particularized data indicating whether and to what extent it had used statistical methods in the apportionment count.³⁰ *See* Supplemental Decl. of Lara Wolfson, Ph.D. (“Wolfson Supp. Decl.”) ¶¶ 12 - 14.

These undisputed facts are easily sufficient to defeat North Carolina’s laches defense. The law is settled that any delay on a plaintiff’s part is measured from the time the plaintiff knew about the claim at issue, for “[a]n indispensable element of lack of diligence is knowledge ... of the legal right, assertion of which is delayed.” *Kling v. Hallmark Cards, Inc.*, 225 F.3d 1030, 1036, (9th Cir. 2000) (quoting *Portland Audubon Soc’y v. Lujan*, 884 F.2d 1233 (9th Cir. 1989) (internal quotation marks omitted)). Because Plaintiffs initially filed their imputation claims

³⁰ North Carolina’s unsupported assertion that the relevant data was made available to Congress on December 28, 2000, is simply mistaken. The data released on that date provided only the total apportionment count for each state, and failed to separate out what portion of each state’s count was attributable to imputation. *See* Wolfson Supp. Decl. ¶14.

within four days of their knowledge of their legal right to do so, North Carolina cannot establish unreasonable delay on Plaintiffs' part.

North Carolina's argument that Plaintiffs unreasonably delayed in seeking the data necessary to determine whether they had standing to challenge the Bureau's use of imputation is simply mistaken. North Carolina offers no factual support for its bald assertion, and the undisputed facts thoroughly undermine its speculation.

Plaintiffs first began to inquire into the possibility of a claim challenging statistical imputation in mid-March, 2001, when a local group issued a press release suggesting that this statistical method may have affected Utah's representation in Congress. *See* Wolfson Supp. Decl. ¶ 12. Extensive inquiries into the public data released by the Census Bureau revealed that the relevant data was not available at that time. *Id.* ¶¶ 12-15. In fact, Plaintiffs sought to acquire the relevant data from the Census Bureau Monitoring Board—Presidential Members (CMBP), and from the House Subcommittee on the Census, but were informed by both that the data was not publicly available and that even these official census monitoring groups did not have sufficient data. *Id.* ¶¶ 17-19. The House Subcommittee released a document with some state-by-state data, but even the senior data analyst of that subcommittee could not tell Plaintiffs how to decipher the data. *Id.* ¶ 19. Finally, on April 9, 2001, that senior data analyst indicated that, on that morning, he had received an explanation of the document from a staff member of the Census Bureau. *Id.* ¶ 22. On that very same day, Plaintiffs were provided with that same explanation and were able to determine for the first time that hot-deck imputation had affected Utah's representation in Congress. *Id.*

In light of these undisputed facts, North Carolina's assertion of unreasonable delay on Plaintiffs' part is simply laughable. The data necessary for Plaintiffs to determine whether they had standing was not publicly available at any time prior to Plaintiffs' filing, and it was only as a result of Plaintiffs' Herculean efforts that they were able to acquire the data by April 9. Because it is undisputed that Plaintiffs first filed their imputation claims within a few days after that date, Plaintiffs surely cannot be deemed to have delayed in proceeding on their claims.

2. Any delay in the resolution of Plaintiffs' claims is attributable to Defendants.

In fact, any delay in the final resolution of Plaintiffs' imputation claims is attributable to Defendants, not Plaintiffs. First, the Census Bureau contributed initially to any delay in the resolution of this dispute in failing to comply with its statutory duty to make publicly available "the number of persons enumerated without using statistical methods and any additions or subtractions thereto" by "January 1, 2001." Pub. L. No. 105-119, Title II, § 209(j). If the Bureau had released all the data called for by statute on December 28, 2000, Plaintiffs would have known of their claims by early January when they filed their initial challenge to the Bureau's partial enumeration of the overseas population, and they could have secured resolution of their imputation case at the same time as the overseas case.

Second, both sets of Defendants further contributed to the delay in the ultimate resolution in opposing Plaintiffs' Motion for an expedited Scheduling Order in this action. Within days after their Motion to Amend was denied in the overseas action, Plaintiffs filed this separate imputation action and immediately sought leave to file a Motion for Summary Judgment on a fast-track briefing schedule that called for the parties' briefing to be completed by June 12, 2001, and a hearing to be held as soon as possible thereafter. *See* Pls.' Mem. for Scheduling Order at

5. Unfortunately, and in direct contravention of their current position, North Carolina opposed that Motion, arguing that section 209's requirement to expedite the case to "the greatest possible extent" was inapplicable to this action and that an "orderly litigation process" should be used instead of the fast-track schedule proposed by Plaintiffs. *See* Def. North Carolina's Opp'n to Proposed Scheduling Order at 2.

For all of these reasons, any delay in this case was caused by the Defendants and cannot be attributed to the Plaintiffs. Under the circumstances, North Carolina simply cannot establish unreasonable delay on Plaintiffs' part. *See City of Reading v. Austin*, 816 F.Supp. 351, 367 (E.D.Pa 1993) ("A delay may be excused upon the showing that the party asserting the defense substantially contributed to the delay through concealment...or any other inequitable conduct.") (quoting *Gruca v. United States Steel Corp.*, 495 F.2d 1252 (3rd Cir. 1974)). In fact, if a laches defense were legally available to Defendants, their own unclean hands would preclude its assertion here.

3. North Carolina cannot establish any cognizable prejudice.

Even assuming for the sake of argument that any delay in this case could be attributed to Plaintiffs, North Carolina's laches defense still would fail because North Carolina cannot identify any cognizable prejudice. *K.P. v. Juzwic*, 891 F.Supp. 703, 716 (D. Conn. 1995) ("Even if the delay were unreasonable or inexcusable, laches would not bar a claim unless the court also determined that the defendants have been prejudiced as a result of the plaintiff's delay."). North Carolina purports to identify prejudice in arguing that it will not have enough time to enact a new

congressional districting plan and make other preparations before the “inexorable march to elections will have begun.”³¹ N.C. Br. at 28.

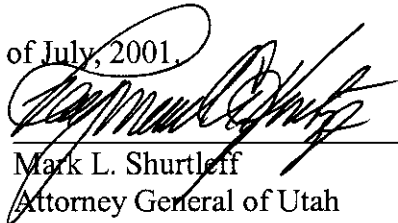
Any such “prejudice,” however, is of North Carolina’s own making and accordingly cannot be sufficient to sustain a laches defense. Surely North Carolina has been savvy enough to do what Utah has done—develop two alternative redistricting plans. If it has not, any possible prejudice that may result is not attributable to any conduct of the Plaintiffs, but to North Carolina itself.

CONCLUSION

For the foregoing reasons, the Court should enter summary judgment in favor of Plaintiffs, and deny the cross-motions for summary judgment and motions to dismiss submitted by Defendants.

³¹ North Carolina focuses solely on the 2002 elections in its prejudice argument. It ignores the fact that there will be four more Congressional elections held using the apportionment from this

Respectfully Submitted this 25th day of July, 2001.



Mark L. Shurtleff
Attorney General of Utah
Raymond A. Hintze
Chief Civil Deputy Attorney General
J. Mark Ward
Assistant Attorney General

Thomas R. Lee
1395 E. Canberra Dr.
Lindon, UT 84042
801-378-9024

Gene C. Schaerr
Michael S. Lee
Jay T. Jorgensen
SIDLEY AUSTIN BROWN & WOOD
1722 Eye St., NW
Washington, DC 20006
202-736-8000

census. It is absurd to argue that North Carolina's difficulty in planning for one election would justify maintaining a potentially unfair Congressional apportionment for ten years.

CERTIFICATE OF SERVICE

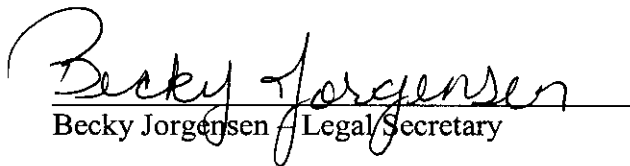
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July 25, 2001 via electronic mail, hand delivery and/or overnight delivery on each of the persons
listed below:

Stuart E. Schiffer
Sandra M. Schraibman
Amy M. Allen
U.S. Department of Justice
Civil Division, Federal Programs Branch
PO Box 883
901 E Street, NW
Washington, DC 20044

Hon. Paul M. Warner
U.S. Attorney's Office, District of Utah
185 South State Street #400
Salt Lake City, UT 84111

Edwin M. Speas, Jr.
Tiare B. Smiley
James Peeler Smith
N. Carolina Attorney General's Off.
114 W. Edenton St.
PO Box 629
Raleigh, NC 27602

Jathan W. Janove
Janove Baar Associates, L.C.
9 Exchange Place #900
Salt Lake City, UT 84111


Becky Jorgensen Legal Secretary

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